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Water Resources Data for Ohio
Water Year 1972. Part II
Water Quality Records

(U.S.) Geological Survey, Columbus, OH Water Resources Div

1973

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1972

Water Resources Data for Ohio

Water Year 1972

Part 2. Water Quality Records

MARCH 3, 1849

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UNITED STATES
DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-72-2

Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVEMBER 1971

S	M	T	W	T	F	S
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DECEMBER 1971

S	M	T	W	T	F	S
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26	27	28	29	30	31	

JANUARY 1972

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23	24	25	26	27	28	29
30	31					

FEBRUARY 1972

S	M	T	W	T	F	S
		1	2	3	4	5
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

MARCH 1972

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
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19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL 1972

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
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23	24	25	26	27	28	29
30						

MAY 1972

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE 1972

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
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18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY 1972

S	M	T	W	T	F	S
						1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST 1972

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER 1972

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

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Water resources data for the 1972 water year for Ohio consist of records of discharge and water quality of streams, and water quality of lakes and reservoirs. This report contains water quality for 79 gaging stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Ohio.

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Water Resources Data
for
Ohio

Part 2. Water Quality Records

MARCH 3, 1849

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-72-2

Prepared in cooperation with the State of Ohio
and with other agencies

Prepared in cooperation with

Ohio Department of Natural Resources,
Division of Water
Ohio Department of Health
Ohio Environmental Protection Agency
Miami Conservancy District
Three Rivers Watershed District
Corps of Engineers, U.S. Army
Environmental Protection Agency

Water resources records, 1972, for Ohio are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Ohio
   Part 1. Surface Water Records

2. Water Resources Data for Ohio
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
975 West Third Avenue
Columbus, Ohio 43212

1973

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WATER RESOURCES DATA FOR OHIO, 1972

Part 2. Water Quality Records

INTRODUCTION

Water resources data for the 1972 water year for Ohio include records of data for the chemical and physical characteristics of surface and ground water. Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly or less frequently, and at some sites data were recorded continuously either on a strip chart or on punched paper tape at 60-minute intervals. Locations of surface water-quality stations, excluding partial-record stations are shown in Figure 1. The records were collected by the Water Resources Division of the U.S. Geological Survey under the direction of J. J. Molloy, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

Ohio Department of Natural Resources, William B. Nye, director, and Roy Winkle, chief, Division of Water.

Ohio Department of Health, T. A. Gardner, acting director, succeeded by J. W. Cashman, director; and J. E. Richards, acting chief engineer.

Ohio Environmental Protection Agency, I. L. Whitman, director.

Miami Conservancy District, L. B. Coy, general manager and secretary.

Three Rivers Watershed District, G. H. Watkins, secretary-treasurer.

Agencies furnishing assistance were:

Corps of Engineers, U.S. Army.
Environmental Protection Agency.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report, are defined as follows:

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Cubic foot per second (cfs,CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

> Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.
>
> Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (ug/l,UG/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l,MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one-thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million (ppm) by using the factors in table 2, page 5.

Odor is reported in terms of the threshold number which is the dilution ratio at which odor is just detectable.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water, which is chemically dispersed.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Hydroxide (OH^{-1})..	0.05880
Ammonia as NH_4^{+1} ...	.05544	Iodide (I^{-1})......	.00788
Arsenic (AS^{+3}).....	.04004	Iron (Fe^{+3})*......	.05372
Barium (Ba^{+2})......	.01456	Lead (Pb^{+2})*......	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226
Cadmium (Cd^{+2}).....	.01779	Manganese (Mn^{+2})*.	.03640
Calcium (Ca^{+2}).....	.04990	Nickel (Ni^{+2})*....	.03406
Carbonate (CO_3^{-2})..	.03333	Nitrate (NO_3^{-1})...	.01613
Chloride (Cl^{-1})....	.02821	Nitrite (NO_2^{-1})...	.02174
Chromium (Cr^{+6})*...	.11539	Phosphate (PO_4^{-3}).	.03159
Cobalt (Co^{+2})*.....	.03394	Potassium (K^{+1})...	.02557
Copper (Cu^{+2})*.....	.03148	Sodium (Na^{+1}).....	.04350
Cyanide (CN^{-1}).....	.03844	Strontium (Sr^{+2})*.	.02283
Fluoride (F^{-1}).....	.05264	Sulfate (SO_4^{-2})...	.02082
Hydrogen (H^{+1}).....	.99209	Zinc (Zn^{+2})*......	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water.

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or by volume, that is discharged during a given time (Colby and Hembree, 1955).

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Turbidity is the reduction of transparency of a liquid due to the presence of suspended particulate matter.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Pesticide program is a network of water-quality stations where periodic samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03276600 which appears just to left of the station name includes the two-digit part number "03" plus the six-digit downstream order number "276600". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 3 (Ohio River basin) and Part 4 (St. Lawrence River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

WELL NUMBER

The well numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote the degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. The system provides the geographic location of the well and a unique number for each well.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in Ohio have been released in the report, "Water Resources Data for Ohio, 1972, Part 1. Surface Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical quality, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l), and water temperatures in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. (See table 2 on page 5.) To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3 below.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

In October 1968 the Geological Survey began reporting many of the chemical constituents, as well as the minor elements, in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 4.)

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

For stations at which samples were collected once each day, analyses were made of the samples having the maximum, minimum, and median dissolved-solids content each month, as indicated by measurements of the specific conductance of each daily sample. Samples collected at weekly or monthly intervals and at partial-record stations were analyzed individually.

At chemical-quality stations where continuous recording instruments are installed, the records consist of daily maximum and minimum values for each constituent measured.

Ground water does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are analyzed individually.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken at about the same time each day when the sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of water-supply papers that give information on quality of surface waters in Ohio are shown in the following table.

Table 4.--Water-supply paper numbers and parts, water years 1947-70

Water year	WSP No.	Water year	Parts 3-4	WSP No.
1941	942	1958	-----	1571
1942	950	1959	-----	1642
1943	970	1960	-----	1742
1944	1022	1961	-----	1882
1945	1030	1962	-----	1942
1946	1050	1963	-----	1948
1947	1102	1964	-----	1955
1948	1132	1965	-----	1962
1949	1162	1966	-----	1992
1950	1186	1967	-----	2012
1951	1197	1968	Part 3	2093
1952	1251		Part 4	2094
1953	1290	A1969	Part 3	2143
1954	1350		Part 4	2144
1955	1400	A1970	Part 3	2153
1956	1451		Part 4	2154
1957	1520			

A In preparation

SELECTED REFERENCES

American Public Health Association, and others, 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.

_____, 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 58 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.

Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, revised edition: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Parterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water Resources Inv., book 3, chap. C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

_____1941, Methods of analyzing sediment samples: Rept. 4.

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U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

______1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

______1957, The development and calibration of visual accumulation tube: Rept. 11.

______1957, Some fundamentals of particle-size analysis: Rept. 12.

______1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

______1961, The single stage sampler for suspended sediment: Rept. 13.

______1963, Determinations of fluvial sediment discharge: Rept. 14.

BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OHIO

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R,8 W., Portage County, at gaging station on left bank at downstream side of bridge on Newton Falls Road, 2.5 miles east of Ravenna.

DRAINAGE AREA.--81.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1967-72 (partial-record station).
Water temperatures: October 1965 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 26.0°C July 23; minimum, freezing point on many days during January to March.

Period of record:
Water temperatures: Maximum, 28.0°C Aug. 24, 1968; minimum, freezing point on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.												
19...	1615	--	--	--	--	--	--	--	--	--	--	--
NOV.												
16...	1105	4.6	--	--	--	--	--	--	--	--	--	--
JAN.												
20...	1030	15	--	--	57	30	--	1.3	5.9	--	--	--
MAR.												
17...	1355	111	--	--	41	24	--	1.4	6.2	--	--	--
MAY												
17...	1510	34	--	--	--	--	--	--	--	--	--	--
JUNE												
07...	1500	--	--	--	--	--	--	--	--	--	--	--
15...	1400	5.0	--	--	45	31	--	.70	2.9	--	--	--
AUG.												
09...	1130	2.5	196	2	59	39	.2	.50	2.1	.10	.31	312

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
19...	--	--	--	--	--	4	1	8	80	<.5	9.0
NOV.											
16...	--	--	463	--	8.0	--	--	--	--	--	--
JAN.											
20...	150	--	368	7.6	.0	--	--	--	--	--	--
MAR.											
17...	86	--	245	7.6	4.0	--	--	--	--	--	--
MAY											
17...	--	--	275	--	15.5	--	--	--	--	--	--
JUNE											
07...	--	--	--	--	18.0	--	--	--	--	<.5	5.0
15...	170	--	420	8.2	21.0	--	--	--	--	--	--
AUG.											
09...	230	66	516	8.4	16.5	--	--	--	--	--	--

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.5	13.5	11.5	2.0	1.0	2.0	1.0	0.5	0.5	1.0	0.0
2	18.0	16.0	15.0	13.0	1.0	0.5	2.0	1.5	0.5	0.5	2.0	0.0
3	18.5	16.0	13.5	10.0	0.5	0.5	1.5	0.5	0.5	0.5	0.5	0.0
4	19.0	16.5	10.0	8.0	0.5	0.5	1.5	1.5	0.5	0.5	0.0	0.0
5	16.5	14.5	9.0	6.5	1.0	0.5	1.5	0.5	0.5	0.5	0.0	0.0
6	15.5	14.5	8.0	6.5	4.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0
7	14.5	12.0	6.5	4.5	5.0	4.0	0.5	0.5	0.5	0.5	1.0	0.0
8	12.0	10.5	4.5	3.5	5.0	5.0	0.5	0.5	0.5	0.5	1.0	0.0
9	12.0	11.5	4.0	3.0	6.0	5.0	0.5	0.5	0.5	0.0	0.0	0.0
10	11.5	11.0	4.5	3.5	8.5	6.0	1.0	0.5	0.0	0.0	0.0	0.0
11	11.0	10.0	6.0	4.5	9.0	5.5	1.5	1.0	0.0	0.0	0.5	0.0
12	11.0	9.5	6.0	5.0	5.5	4.0	1.0	1.0	0.0	0.0	3.0	0.5
13	11.0	9.0	6.5	5.0	4.5	3.5	3.5	1.0	0.0	0.0	4.0	2.0
14	13.0	11.0	6.5	4.5	3.5	2.0	1.0	0.5	0.0	0.0	4.0	2.0
15	12.0	10.0	9.5	6.5	7.0	2.0	0.5	0.5	0.0	0.0	2.0	1.5
16	14.5	11.5	9.0	7.0	7.0	6.0	0.5	0.5	0.0	0.0	3.5	1.5
17	14.5	12.0	8.0	6.0	6.0	3.0	0.5	0.5	0.0	0.0	3.5	3.0
18	14.5	12.0	8.5	6.0	3.0	1.0	0.5	0.0	0.0	0.0	3.0	2.0
19	13.5	10.5	9.0	7.0	1.5	0.5	0.0	0.0	0.0	0.0	4.5	0.5
20	13.5	11.0	7.0	6.0	2.0	1.5	0.0	0.0	0.0	0.0	5.0	1.5
21	14.5	11.5	6.0	1.0	3.0	2.0	0.0	0.0	0.0	0.0	6.5	4.0
22	13.5	12.0	1.5	1.0	3.0	0.5	0.5	0.0	0.0	0.0	6.5	3.5
23	14.5	13.0	1.0	0.5	1.0	0.5	1.5	0.5	0.0	0.0	3.5	0.5
24	14.5	13.5	1.5	1.0	3.5	1.0	3.0	1.5	0.0	0.0	3.0	0.0
25	13.5	13.5	3.0	1.5	3.5	2.0	3.0	0.5	0.0	0.0	2.0	0.0
26	14.0	13.5	3.5	2.0	5.0	3.5	0.5	0.5	0.0	0.0	4.5	0.0
27	14.0	11.5	3.5	3.5	6.5	5.0	0.5	0.5	0.0	0.0	6.0	1.5
28	14.5	12.0	3.5	3.5	7.0	4.0	0.5	0.5	0.0	0.0	6.5	2.0
29	13.5	11.0	3.5	3.0	4.0	2.0	0.5	0.5	0.0	0.0	4.5	2.0
30	13.5	10.5	3.0	2.0	5.5	2.0	0.5	0.5	---	---	4.5	3.0
31	14.5	11.0	---	---	4.5	2.0	0.5	0.5	---	---	6.0	1.0
MONTH	19.0	9.0	15.0	0.5	9.0	0.5	3.5	0.0	0.5	0.0	6.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.5	3.0	16.0	12.0	15.0	13.0	20.5	16.0	21.0	18.5	20.5	18.0
2	4.5	2.0	16.5	14.5	16.0	13.5	19.5	17.0	20.5	19.0	20.5	18.5
3	5.5	2.0	16.0	14.0	19.5	15.0	18.5	16.5	21.5	19.5	19.5	18.0
4	6.0	4.5	15.5	11.0	21.0	16.5	18.0	15.0	21.5	19.0	19.0	15.5
5	6.5	3.0	14.5	9.0	20.5	15.5	16.5	15.0	20.5	16.0	17.0	14.0
6	9.0	4.5	17.0	11.0	19.0	16.0	15.0	13.5	19.0	16.0	18.0	14.0
7	8.5	1.5	15.5	14.0	19.5	14.0	16.0	13.5	20.5	18.0	19.0	14.5
8	4.0	0.5	14.5	11.5	20.5	14.5	16.5	14.5	20.0	18.0	18.0	16.5
9	6.0	0.5	11.5	9.5	19.5	17.0	19.0	15.0	18.0	16.0	19.0	15.5
10	9.0	3.5	13.0	8.0	18.0	15.0	20.0	16.5	18.0	14.5	18.0	13.5
11	11.5	6.5	15.5	9.0	16.5	11.5	21.0	18.0	18.5	14.5	17.0	15.0
12	14.0	8.0	18.0	10.5	18.0	13.5	21.5	19.0	18.0	16.5	17.0	16.5
13	15.0	10.5	15.5	12.0	17.0	15.5	22.0	19.5	20.5	16.5	19.5	17.0
14	13.5	10.5	17.0	13.5	20.5	16.5	23.5	20.0	20.5	18.0	19.5	18.0
15	13.5	10.0	16.5	14.5	21.0	19.0	22.0	20.5	21.5	19.0	18.0	15.0
16	13.5	10.5	15.0	14.0	20.5	16.5	21.0	19.0	20.5	16.5	17.0	14.5
17	13.0	9.5	15.0	13.5	18.5	16.0	22.0	19.5	19.5	18.5	20.0	16.5
18	14.5	9.0	18.0	12.0	19.5	15.0	23.5	20.0	21.5	18.5	19.5	18.0
19	13.5	11.0	19.0	14.5	21.0	16.5	24.0	21.0	22.0	20.0	18.5	17.0
20	13.0	9.5	18.0	15.0	20.0	18.5	24.5	21.0	21.5	18.5	18.0	15.0
21	9.5	7.0	20.0	14.5	19.0	16.0	25.5	21.5	21.5	18.5	17.0	14.5
22	9.5	8.0	20.0	15.5	16.0	13.0	25.5	22.0	21.0	19.0	17.0	15.0
23	13.0	9.0	20.5	15.5	13.0	11.5	26.0	23.0	20.0	19.0	15.0	13.0
24	11.5	9.0	21.5	15.5	12.0	12.0	25.0	23.0	21.5	19.0	14.5	13.0
25	11.5	7.0	21.5	16.5	13.5	12.0	23.5	21.0	21.5	20.0	16.0	14.5
26	12.0	6.5	20.5	16.0	16.0	13.5	21.5	19.0	22.0	20.0	17.0	16.0
27	13.5	7.0	19.5	14.5	17.0	14.0	20.0	18.5	21.5	20.5	17.0	16.0
28	13.5	7.0	19.5	14.5	19.0	15.0	20.0	16.5	21.0	19.5	16.0	14.5
29	13.5	9.0	20.0	15.0	19.0	17.0	20.0	16.5	21.5	18.0	16.0	15.0
30	15.0	10.5	19.0	16.5	18.0	17.0	21.0	17.0	20.5	17.0	16.0	13.0
31	---	---	16.5	14.0	---	---	21.0	18.0	21.0	17.0	---	---
MONTH	15.0	0.5	21.5	8.0	21.0	11.5	26.0	13.5	22.0	14.5	20.5	13.0
YEAR	26.0	0.0										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO

LOCATION.--Lat 41°14'22", long 80°52'56", Trumbull County, on left bank 10 ft upstream from Ohio Edison Company diversion dam, 30 ft upstream from Duck Creek, and 330 ft upstream from gaging station at bridge on Leavitt Road in Leavittsburg.

DRAINAGE AREA.--542 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, July 1967 to September 1968 (published as "at Leavittsburg"), October 1968 to September 1972.
Water temperatures: October 1949 to September 1968 (published as "at Leavittsburg"), October 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 597 micromhos Jan. 31; minimum, 143 micromhos Apr. 16.
Dissolved oxygen: Maximum, 14.3 mg/l Apr. 10; minimum, 4.9 mg/l June 21.
Water temperatures: Maximum, 25.5°C July 24, 25; minimum, freezing point on many days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.									
05...	1330	211	--	--	80	--	30	--	--
12...	0710	250	88	0	72	76	27	.3	.70
20...	1130	--	--	--	--	--	--	--	--
30...	1330	175	102	0	84	120	31	.3	.60
NOV.									
02...	1330	181	--	--	88	--	32	--	--
13...	0830	193	116	0	95	120	32	.2	.30
23...	0800	202	118	0	97	110	32	.2	.20
DEC.									
02...	0900	338	--	--	57	--	38	--	--
04...	0900	190	84	0	69	95	38	.1	.90
08...	1000	2400	33	0	27	55	19	.1	1.5
JAN.									
04...	0730	430	58	0	48	66	23	.2	.90
06...	1230	349	--	--	56	--	28	--	--
19...	1150	172	100	0	82	120	34	.2	.80
FEB.									
02...	0725	205	100	0	82	120	34	.2	.60
03...	1330	217	--	--	85	--	31	--	--
19...	1050	370	64	0	52	90	40	.2	.90
MAR.									
02...	0900	1780	32	0	30	49	22	.1	1.3
11...	0800	1140	65	0	53	120	32	.2	1.4
APR.									
04...	0735	470	82	0	67	100	33	.3	2.0
06...	0900	307	--	--	66	--	38	--	--
18...	0630	2120	40	0	33	58	18	.3	1.1
MAY									
04...	0830	625	--	--	66	--	30	--	--
10...	1450	1200	74	0	61	62	20	.3	1.0
25...	0730	324	80	0	66	92	28	.2	1.5
JUNE									
08...	1345	282	--	--	67	--	30	--	--
17...	0850	382	92	0	75	75	25	.3	1.2
26...	1700	394	92	0	75	86	28	.4	1.6
JULY									
06...	1330	830	--	--	62	--	26	--	--
08...	0730	346	76	0	62	62	22	.2	2.1
29...	0710	366	84	0	69	100	26	.2	1.2
AUG.									
03...	1300	450	84	0	69	110	26	.2	1.3
03...	1330	450	--	--	69	--	31	--	--
27...	0800	328	87	0	71	93	26	.2	1.0
SEP.									
07...	1300	307	--	--	75	--	31	--	--
16...	0832	426	96	0	79	98	26	.2	.80
20...	0730	930	70	0	57	80	20	.2	.90

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-72): Maximum, 700 micromhos Nov. 12, 13, 1969; minimum, 143 micromhos Apr. 16, 1972.
pH (1970-71): Maximum, 8.0 Apr. 13-15, 17, 1971; minimum, 6.2 Dec. 26, 27, 1970, Jan. 4, 1971.
Dissolved oxygen (1970-72): Maximum, 14.6 mg/l Dec. 29, 1970; minimum, 4.2 mg/l June 12, 13, 1971.
Water temperatures (1949-67, 1969-72): Maximum, 28.0°C June 29, 30, 1952; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since July 1967. Maximum recorded specific conductance value of 780 micromhos occurred May 27, 1969. Maximum recorded pH of 8.5 occurred Aug. 5, 1968. Minimum recorded pH of 5.8 occurred Nov. 22, 23, 29, 31, 1969, Apr. 10, 1972. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. A special sample was collected each month as part of the Environmental Protection Agency national network. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Mahoning River at Leavittsburg, Ohio (station 03094000, drainage area 575 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
05...	--	--	--	160	--	--	455	19.5	24.5
12...	3.2	--	--	150	78	242	398	12.0	--
20...	--	--	--	--	--	--	--	--	--
30...	2.8	--	--	210	130	314	521	15.5	--
NOV.									
02...	--	--	--	210	--	--	535	15.5	21.0
13...	1.5	--	--	210	120	344	527	7.0	--
23...	1.1	--	--	210	110	328	508	5.0	--
DEC.									
02...	--	--	--	150	--	--	410	2.5	2.0
04...	3.9	--	--	170	100	296	457	1.5	--
08...	6.8	--	--	84	57	160	248	5.5	--
JAN.									
04...	3.8	--	--	120	72	182	304	2.0	--
06...	--	--	--	140	--	--	380	1.0	.0
19...	3.7	--	--	200	120	322	506	.5	--
FEB.									
02...	2.5	--	--	210	130	346	513	.5	--
03...	--	--	--	190	--	--	480	1.0	4.5
19...	4.0	--	--	150	98	290	427	.0	--
MAR.									
02...	5.9	--	--	80	54	142	250	2.0	2.0
11...	6.4	--	--	190	140	300	481	2.0	--
APR.									
04...	8.9	--	--	180	113	300	459	5.5	--
06...	--	--	--	170	--	--	460	5.5	4.0
18...	4.7	--	--	86	53	168	260	12.0	--
MAY									
04...	--	--	--	150	--	--	370	15.5	10.0
10...	4.2	--	--	120	60	178	300	11.0	--
25...	6.5	--	--	160	94	260	421	19.0	--
JUNE									
08...	--	--	--	180	--	--	418	18.5	24.0
17...	5.4	--	--	160	84	238	392	19.5	--
26...	7.3	--	--	160	84	264	424	16.0	--
JULY									
06...	--	1.1	.18	140	--	--	358	17.0	21.0
08...	9.2	--	--	130	68	192	333	16.5	--
29...	5.4	--	--	180	110	254	423	21.5	--
AUG.									
03...	5.8	--	--	190	120	278	440	23.5	--
03...	--	1.1	.18	180	--	--	440	23.5	30.0
27...	4.2	--	--	170	98	248	412	23.0	--
SEP.									
07...	--	1.3	.25	180	--	--	430	19.5	26.5
16...	3.8	--	--	180	100	258	440	19.5	--
20...	4.1	--	--	140	82	238	355	19.0	--

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	OIL-GREASE (SEVER-ITY)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
05...	6.4	69	2.2	14	7200	300	0	--	--
12...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	<.5	4.0
30...	--	--	--	--	--	--	--	--	--
NOV.									
02...	6.5	65	2.0	16	11000	260	0	--	--
13...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
DEC.									
02...	11.0	80	2.0	20	20000	3100	0	--	--
04...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
JAN.									
04...	--	--	--	--	--	--	--	--	--
06...	11.8	83	2.7	16	4400	240	--	--	--
19...	--	--	--	--	--	--	--	--	--
FEB.									
02...	--	--	--	--	--	--	--	--	--
03...	11.8	83	2.0	13	3200	620	0	--	--
19...	--	--	--	--	--	--	--	--	--
MAR.									
02...	11.4	83	2.4	19	5100	540	0	--	--
11...	--	--	--	--	--	--	--	--	--
APR.									
04...	--	--	--	--	--	--	--	--	--
06...	12.8	100	2.2	16	2800	440	0	--	--
18...	--	--	--	--	--	--	--	--	--
MAY									
04...	7.6	76	2.7	20	4400	780	0	--	--
10...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
JUNE									
08...	6.8	72	3.0	17	3600	290	0	.6	4.0
17...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
JULY									
06...	7.0	72	2.6	23	12000	1000	0	--	--
08...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
AUG.									
03...	6.4	74	--	--	--	--	--	--	--
03...	6.6	77	3.0	19	3000	1400	0	--	--
27...	--	--	--	--	--	--	--	--	--
SEP.									
07...	7.6	82	3.0	20	3500	760	0	--	--
16...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 9171 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	439	412	---	---	464	381	207	182	525	456	420	273
2	427	409	---	---	429	384	366	191	525	453	269	209
3	426	412	---	---	452	428	297	261	476	389	219	203
4	452	420	---	---	480	452	356	287	534	399	288	219
5	472	433	521	507	510	476	392	263	492	399	327	288
6	448	437	517	500	539	489	383	303	---	---	356	327
7	451	445	518	501	506	290	384	369	---	---	408	347
8	448	437	513	501	290	209	393	384	---	---	420	339
9	446	436	524	503	245	206	498	389	---	---	375	317
10	460	439	519	488	324	245	431	413	507	489	465	375
11	440	395	520	493	363	321	425	389	519	507	497	465
12	403	394	523	503	390	363	389	309	516	488	498	477
13	424	397	526	519	395	381	386	314	525	480	479	386
14	467	422	524	518	401	383	390	383	537	503	386	257
15	512	466	572	518	387	287	480	344	534	476	284	254
16	509	496	532	516	360	240	443	333	476	464	351	284
17	509	496	526	496	398	233	470	333	465	437	360	320
18	503	494	507	500	357	287	506	326	446	429	374	318
19	517	497	519	507	380	309	509	485	438	429	438	374
20	520	497	524	515	386	378	494	405	459	435	459	438
21	515	508	525	513	384	369	492	479	462	452	465	458
22	514	506	526	502	494	342	479	383	485	459	465	431
23	523	508	521	504	408	378	452	438	479	453	428	374
24	511	506	504	487	438	390	449	429	479	455	417	377
25	509	506	509	491	413	360	443	365	470	459	432	413
26	---	---	531	507	437	393	419	339	479	470	413	399
27	---	---	532	513	422	402	464	419	488	476	432	407
28	---	---	519	497	483	399	455	384	486	476	431	411
29	---	---	522	510	429	404	470	441	480	422	438	420
30	---	---	515	464	473	335	498	408	---	---	441	434
31	---	---	---	---	372	171	597	432	---	---	458	438
MONTH	523	394	572	464	539	171	597	182	537	389	498	203

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	464	450	404	393	414	402	407	399	432	417	429	417
2	453	447	402	386	414	405	417	401	440	426	434	423
3	452	446	395	378	411	401	413	398	443	431	443	420
4	465	452	380	351	414	402	399	362	440	437	437	411
5	458	435	386	350	438	413	375	357	447	438	423	416
6	446	438	402	384	428	408	362	354	452	443	434	416
7	464	441	414	401	425	414	359	330	459	437	431	425
8	456	443	411	393	425	411	350	330	441	437	434	422
9	455	441	399	354	420	411	381	350	438	432	434	420
10	444	437	354	275	417	411	404	381	450	434	441	416
11	443	434	309	275	422	411	405	401	444	429	419	411
12	456	438	359	308	429	413	414	404	446	437	423	410
13	476	455	384	357	423	408	416	405	440	416	429	419
14	477	335	393	381	423	411	420	411	425	410	425	411
15	336	173	384	339	416	410	429	398	428	419	431	420
16	173	143	360	342	422	401	413	390	431	420	446	431
17	---	---	359	345	402	383	411	300	426	417	465	434
18	356	266	375	353	407	384	408	320	428	411	437	401
19	386	363	395	374	432	402	423	408	444	416	401	284
20	386	359	390	383	414	399	422	411	432	411	404	317
21	359	305	398	387	411	402	420	410	417	408	427	404
22	381	336	---	---	413	401	422	410	420	411	439	421
23	374	345	---	---	420	408	420	408	432	419	440	437
24	384	356	418	415	420	396	417	407	432	416	445	430
25	395	383	424	418	407	399	419	407	435	419	434	430
26	396	387	---	---	426	399	422	413	429	410	437	424
27	393	384	---	---	411	396	423	411	429	408	434	421
28	401	389	---	---	423	405	426	422	420	405	424	407
29	411	396	---	---	441	410	438	425	428	408	433	419
30	413	402	407	401	443	405	438	419	432	423	432	412
31	---	---	413	401	---	---	425	420	432	420	---	---
MONTH	477	143	424	275	443	383	438	300	459	405	465	284
YEAR	597	143										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.1	7.1	---	---	7.1	6.9	7.0	7.0	7.2	7.0	---	---
2	7.1	7.0	---	---	7.1	6.9	7.0	7.0	7.0	6.9	---	---
3	7.1	7.0	---	---	7.1	7.0	7.0	7.0	7.1	6.8	---	---
4	7.1	7.0	---	---	7.1	6.9	7.1	7.0	---	---	---	---
5	7.1	6.9	7.2	6.9	7.1	7.0	7.1	7.0	---	---	---	---
6	6.9	6.9	7.2	7.0	7.1	7.0	7.1	7.0	---	---	---	---
7	7.0	6.9	7.2	7.2	7.1	7.0	7.1	7.0	---	---	---	---
8	7.0	6.9	7.2	7.1	7.1	7.0	7.1	7.0	---	---	---	---
9	7.0	6.9	7.2	7.2	7.1	7.0	7.1	7.0	---	---	---	---
10	7.0	7.0	7.3	7.1	7.1	7.0	7.4	6.9	---	---	---	---
11	7.0	6.9	7.7	7.1	7.1	6.8	7.1	7.0	---	---	---	---
12	7.0	6.9	7.9	7.1	7.1	7.0	7.5	7.0	---	---	---	---
13	7.0	6.9	7.3	7.1	7.1	7.0	7.1	7.0	---	---	---	---
14	6.9	6.9	---	---	7.1	7.0	7.6	7.0	---	---	---	---
15	6.9	6.9	7.7	7.0	7.1	7.0	7.2	7.0	---	---	---	---
16	6.9	6.7	7.1	7.0	7.1	7.0	7.1	7.1	---	---	---	---
17	6.9	6.8	7.2	7.1	7.1	7.1	7.1	7.0	---	---	---	---
18	6.9	6.8	7.2	7.1	7.1	6.9	7.2	7.0	---	---	---	---
19	7.0	6.9	7.2	7.1	7.0	6.9	7.0	7.0	---	---	---	---
20	7.0	6.8	7.2	7.0	6.9	6.8	7.0	7.0	---	---	---	---
21	7.0	6.9	7.1	7.0	7.1	6.9	7.0	7.0	---	---	---	---
22	7.0	6.9	7.1	7.1	7.1	6.7	7.0	7.0	---	---	---	---
23	6.9	6.9	7.1	7.1	7.1	7.1	7.0	7.0	---	---	---	---
24	7.0	6.9	7.2	7.1	7.1	6.8	7.0	7.0	---	---	---	---
25	6.9	6.9	7.1	7.0	7.1	7.0	7.1	7.0	---	---	---	---
26	---	---	7.1	7.0	7.0	7.0	7.1	7.0	---	---	---	---
27	---	---	7.1	7.0	7.4	7.0	7.1	7.0	---	---	---	---
28	---	---	7.1	7.0	7.1	6.9	7.1	7.0	---	---	---	---
29	---	---	7.1	7.0	7.1	6.9	7.3	7.1	---	---	---	---
30	---	---	7.1	7.0	7.1	6.8	7.1	7.0	---	---	---	---
31	---	---	---	---	7.0	6.6	7.3	6.9	---	---	---	---
MONTH	7.1	6.7	7.9	6.9	7.4	6.6	7.6	6.9	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	6.8	6.6	7.1	6.9	8.1	7.3	7.0	6.9	7.0	6.8
2	---	---	6.9	6.7	7.0	6.7	7.7	7.2	7.0	6.9	7.1	6.9
3	---	---	6.9	6.6	7.0	6.9	7.3	7.2	7.0	6.9	7.1	7.0
4	---	---	7.3	6.7	7.1	6.9	7.5	7.1	7.1	6.9	7.2	7.0
5	---	---	7.3	6.9	7.2	6.9	7.3	7.1	7.0	6.8	7.1	6.9
6	7.3	6.2	7.2	7.0	7.2	7.0	7.3	7.0	6.9	6.7	7.2	6.8
7	6.9	6.7	7.4	7.1	7.2	6.9	7.5	6.9	6.9	6.8	7.1	7.0
8	6.8	6.4	7.3	7.1	7.2	6.8	7.9	7.0	6.9	6.8	7.1	7.0
9	6.8	6.1	7.3	7.0	7.1	6.8	7.5	7.0	6.9	6.8	7.2	7.1
10	6.8	5.8	7.1	6.8	7.2	7.1	7.3	7.1	6.9	6.7	7.5	7.1
11	6.9	6.2	7.3	6.8	7.3	6.9	7.6	7.2	6.9	6.7	7.2	6.9
12	7.1	6.4	7.4	6.9	7.1	6.9	7.7	7.1	6.8	6.6	7.1	7.0
13	7.2	6.9	7.5	7.1	7.0	6.9	7.7	7.3	7.0	6.6	7.2	7.0
14	7.1	6.5	7.4	7.1	7.1	6.9	7.6	7.3	6.9	6.6	7.2	7.1
15	7.1	6.1	7.3	7.1	7.2	7.0	7.4	7.3	6.9	6.6	7.3	7.1
16	6.4	6.3	7.3	6.8	7.2	7.1	7.5	7.3	6.8	6.6	7.3	7.1
17	---	---	7.2	6.9	7.9	7.2	7.4	7.0	6.7	6.6	7.4	7.1
18	7.0	6.2	7.3	7.1	7.7	7.2	7.6	7.1	6.9	6.6	7.4	7.1
19	7.1	6.8	7.3	7.1	7.4	7.1	7.6	7.1	7.2	6.7	7.1	6.7
20	7.1	7.0	7.3	7.1	7.3	7.0	7.6	7.1	7.0	6.7	7.2	6.9
21	7.0	6.5	7.3	6.8	7.1	6.9	7.6	7.1	6.9	6.6	7.3	7.0
22	7.0	6.8	---	---	7.0	6.9	7.7	7.2	6.9	6.6	7.3	7.1
23	6.9	6.7	---	---	7.0	6.8	7.7	7.2	6.8	6.7	7.3	7.1
24	7.1	6.9	8.0	7.7	7.3	6.7	7.7	7.3	7.0	6.7	7.2	7.1
25	7.2	7.0	8.4	7.3	7.4	7.3	7.5	7.3	7.0	6.8	7.2	7.1
26	7.2	6.8	---	---	7.4	7.1	7.5	7.2	7.0	6.8	7.2	7.1
27	7.1	6.6	---	---	7.7	7.0	7.3	7.2	6.9	6.7	7.2	7.1
28	7.1	6.4	---	---	7.8	7.1	7.2	6.8	7.0	6.8	7.2	7.0
29	7.1	6.4	---	---	7.4	7.1	7.0	6.8	7.0	6.8	7.2	7.1
30	7.0	6.5	7.2	7.1	7.5	7.2	7.0	6.8	7.1	6.7	7.3	7.1
31	---	---	7.1	7.0	---	---	7.0	6.9	7.0	6.7	---	---
MONTH	7.3	5.8	8.4	6.6	7.9	6.7	8.1	6.8	7.2	6.6	7.5	6.7

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.9	5.6	---	---	11.6	11.1	11.8	11.6	---	---	12.1	11.5
2	7.0	5.9	---	---	11.7	11.4	11.9	11.6	---	---	11.8	11.5
3	6.9	6.6	---	---	11.9	11.6	11.9	11.7	---	---	11.7	11.5
4	6.8	6.2	---	---	12.1	11.7	12.0	11.8	---	---	11.6	11.4
5	6.7	6.0	7.3	6.6	12.1	11.9	12.1	11.7	---	---	11.4	11.1
6	6.6	6.1	7.8	7.1	12.1	11.6	11.9	11.1	---	---	11.1	10.8
7	7.0	6.4	8.6	7.8	11.6	10.4	11.4	11.0	---	---	11.0	10.6
8	7.5	6.7	8.8	8.6	10.5	10.3	11.2	10.9	---	---	10.7	10.4
9	7.6	7.3	8.9	8.7	10.3	9.9	10.9	10.6	---	---	10.8	10.6
10	7.8	7.4	9.9	8.7	9.9	9.7	10.6	10.2	11.3	10.0	11.1	10.7
11	8.2	7.8	10.0	9.9	9.9	9.6	10.5	10.2	10.6	10.0	11.2	10.9
12	8.1	7.9	10.3	10.0	10.8	9.9	10.6	10.2	10.6	10.3	11.2	11.0
13	8.3	8.1	---	---	11.1	10.8	10.7	10.2	10.7	10.2	11.0	10.7
14	8.2	7.6	---	---	11.1	10.9	10.5	10.2	10.3	10.1	10.7	10.2
15	7.6	7.3	10.0	9.7	11.5	10.2	10.8	10.3	10.2	10.0	11.0	10.4
16	8.4	5.9	9.9	9.6	10.2	9.6	10.8	10.2	10.3	10.1	11.1	10.8
17	8.7	7.8	9.9	9.6	10.1	9.7	10.8	10.6	10.4	10.1	11.1	11.0
18	8.6	7.9	9.6	9.2	11.3	7.1	10.7	10.4	10.4	10.2	11.7	11.1
19	8.3	7.8	9.4	9.2	11.8	11.3	10.4	10.3	10.4	10.2	12.2	11.7
20	8.0	7.3	9.5	9.2	11.7	11.5	10.3	10.1	10.4	10.2	12.2	12.0
21	8.0	7.6	9.2	8.8	11.6	11.3	10.2	10.0	10.7	10.3	12.0	11.6
22	7.8	7.3	9.9	8.9	12.1	11.5	11.1	10.2	11.1	10.5	11.6	10.8
23	7.6	6.9	10.7	10.0	12.6	10.4	10.8	10.7	11.3	11.0	11.1	10.8
24	7.1	6.6	11.2	10.7	12.6	12.2	10.8	10.6	11.3	11.1	11.4	11.1
25	6.6	6.2	11.3	11.2	12.3	12.0	10.8	10.5	11.4	11.0	11.5	11.1
26	---	---	11.5	11.2	12.0	11.2	10.7	10.5	11.5	11.2	11.6	11.2
27	---	---	11.3	11.1	11.3	10.9	10.6	9.9	11.7	11.3	11.6	11.2
28	---	---	11.3	11.1	11.2	10.5	10.0	9.7	12.0	11.5	11.4	11.2
29	---	---	11.1	10.8	11.1	10.5	---	---	12.2	11.7	11.3	10.9
30	---	---	11.0	10.7	11.1	9.6	---	---	---	---	11.4	10.9
31	---	---	---	---	12.8	11.1	---	---	---	---	11.8	11.0
MONTH	8.7	5.6	11.5	6.6	12.8	7.1	12.1	9.7	---	---	12.2	10.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.8	11.2	10.3	9.6	7.6	6.4	8.2	7.0	7.1	6.4	7.5	6.6
2	11.8	11.2	9.9	9.2	8.1	7.4	8.0	7.3	6.9	6.5	7.2	6.6
3	12.1	11.4	9.9	8.1	8.1	7.6	7.4	6.4	6.9	5.8	7.0	6.6
4	11.8	11.5	8.5	7.3	7.9	7.1	7.1	6.4	7.2	6.2	7.4	6.6
5	12.1	11.2	9.0	7.1	7.4	6.5	7.0	6.7	7.0	6.5	7.3	6.9
6	12.8	12.1	8.6	8.3	7.1	6.4	7.4	6.5	6.9	6.5	7.5	6.9
7	12.3	11.7	8.3	7.9	7.0	6.3	7.5	7.2	6.9	6.3	7.9	7.3
8	12.3	11.3	7.9	7.2	7.3	6.6	7.2	7.0	6.9	6.4	7.7	7.1
9	12.7	12.1	7.2	6.9	7.1	6.6	7.3	6.7	6.7	6.2	7.7	6.8
10	14.3	12.6	10.0	7.1	7.2	6.6	8.0	6.9	6.9	6.3	8.0	7.2
11	14.1	13.8	9.8	9.5	7.3	6.4	8.0	6.8	7.7	6.7	7.9	7.1
12	13.8	13.0	9.5	9.2	7.1	6.8	7.7	6.9	7.7	7.1	7.7	7.3
13	13.0	9.4	9.6	9.3	7.0	6.5	7.2	6.5	7.7	7.1	7.5	6.9
14	9.4	7.0	9.4	9.0	6.8	6.1	7.3	6.3	7.6	7.2	7.3	6.9
15	7.7	7.0	8.9	8.3	6.6	6.0	6.9	6.2	7.8	7.0	7.3	6.4
16	7.5	5.8	8.4	8.1	7.0	5.4	6.9	6.0	7.8	7.2	7.1	6.8
17	---	---	8.4	8.2	6.3	5.0	7.3	6.7	7.6	7.3	7.3	6.6
18	10.1	8.8	8.8	8.2	6.9	5.3	7.5	7.0	7.6	7.0	7.0	6.4
19	10.0	9.6	8.4	8.0	6.6	5.8	7.6	7.0	7.5	7.1	6.6	6.2
20	9.6	9.0	8.8	7.6	5.9	5.2	7.2	6.9	7.5	6.9	7.1	6.6
21	9.4	9.1	8.5	7.7	5.5	4.9	6.9	6.5	7.6	6.8	7.4	7.0
22	10.1	9.2	---	---	6.7	5.0	6.9	6.3	7.3	6.9	7.6	7.1
23	9.8	9.5	---	---	7.5	6.7	6.8	6.4	7.1	6.6	7.7	7.4
24	10.1	9.6	8.6	8.1	8.2	7.4	6.4	6.1	7.5	6.4	7.8	7.6
25	10.4	9.8	8.2	7.3	8.1	7.9	6.3	5.8	7.3	6.8	7.9	7.6
26	10.4	9.8	---	---	8.1	7.7	6.1	5.6	7.0	6.5	7.8	7.7
27	10.4	9.8	---	---	7.9	7.5	5.9	5.5	6.7	6.3	7.8	7.7
28	10.5	9.8	---	---	8.0	7.1	5.9	5.4	7.1	6.3	8.1	7.8
29	10.8	9.8	---	---	7.6	6.9	6.1	5.7	7.5	6.6	8.1	7.9
30	10.4	9.8	8.2	7.8	7.5	6.7	6.4	5.8	7.5	6.6	8.1	8.0
31	---	---	7.8	6.7	---	---	6.8	6.2	7.4	6.7	---	---
MONTH	14.3	5.8	10.3	6.7	8.2	4.9	8.2	5.4	7.8	5.8	8.1	6.2
YEAR	14.3	4.9										

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03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	18.5	---	---	3.5	2.5	3.5	2.0	---	---	1.5	0.5
2	20.5	18.5	---	---	3.0	2.5	3.0	2.5	---	---	3.5	0.5
3	20.5	19.0	---	---	2.5	1.5	2.5	1.5	---	---	1.5	1.0
4	21.0	19.5	---	---	2.0	1.0	2.0	1.5	---	---	1.5	0.5
5	20.5	18.5	12.5	11.0	2.0	1.0	2.0	1.5	---	---	1.5	1.0
6	20.0	18.5	11.5	10.0	3.0	1.5	1.5	1.0	---	---	1.0	0.5
7	19.0	17.5	10.0	8.5	5.5	2.5	1.0	0.5	---	---	2.0	0.5
8	17.5	16.0	8.5	7.5	6.5	5.5	1.0	0.5	---	---	3.0	2.0
9	16.0	15.0	8.0	6.0	7.0	6.5	1.0	0.5	---	---	2.0	1.5
10	15.5	14.5	6.0	5.0	8.0	7.0	2.0	0.5	0.5	0.0	2.5	1.5
11	14.5	12.5	6.5	5.0	9.5	6.5	2.0	1.5	0.5	0.0	2.5	2.0
12	13.0	12.0	6.5	5.0	8.5	6.0	2.0	1.5	0.0	0.0	3.5	2.5
13	13.0	11.5	---	---	6.0	4.5	3.0	1.5	0.0	0.0	5.0	3.5
14	13.5	12.5	---	---	5.0	3.5	2.5	1.5	0.5	0.0	5.5	4.5
15	14.0	12.0	9.5	7.0	6.5	3.5	1.5	1.0	0.0	0.0	4.0	3.0
16	15.0	13.5	9.0	8.0	8.0	6.0	1.0	0.5	0.0	0.0	4.0	3.0
17	15.5	14.5	9.0	7.5	7.5	5.5	1.0	0.0	0.5	0.0	4.0	4.0
18	16.0	14.5	9.0	8.0	5.5	3.5	0.5	0.0	0.0	0.0	4.5	3.5
19	16.5	14.5	10.0	9.0	4.5	2.0	0.0	0.0	0.5	0.0	4.0	3.0
20	15.5	14.5	9.5	8.0	3.5	2.5	0.5	0.0	0.5	0.0	4.0	3.0
21	15.5	14.0	8.0	7.0	4.0	1.0	0.0	0.0	0.5	0.0	5.0	4.0
22	15.5	14.5	7.0	5.0	3.5	2.5	0.0	0.0	0.5	0.0	5.5	5.0
23	15.5	15.0	5.5	3.5	2.5	1.5	1.5	0.0	1.0	0.0	5.0	3.5
24	16.0	15.5	3.5	2.5	3.0	1.5	2.5	1.5	0.0	0.0	3.5	2.5
25	16.0	15.5	3.0	2.0	3.0	3.0	3.0	1.5	0.0	0.0	3.0	2.5
26	---	---	3.5	2.5	4.5	3.0	1.5	0.5	0.5	0.0	3.0	2.5
27	---	---	3.5	3.0	5.0	4.0	1.0	0.0	0.5	0.0	4.0	3.0
28	---	---	3.5	3.0	6.5	4.0	---	---	0.0	0.0	5.5	4.0
29	---	---	3.5	3.0	6.5	4.5	---	---	0.5	0.0	5.0	4.0
30	---	---	3.5	3.5	5.0	4.0	---	---	---	---	4.5	4.0
31	---	---	---	---	4.5	3.5	0.5	0.0	---	---	5.0	3.5
MONTH	21.0	11.5	12.5	2.0	9.5	1.0	3.5	0.0	---	---	5.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	4.5	12.5	10.0	17.5	15.5	20.0	18.0	24.5	22.5	22.0	21.0
2	5.5	4.5	14.0	12.0	16.0	15.0	20.0	19.0	24.5	23.5	22.0	21.0
3	5.0	4.0	14.5	13.0	18.0	15.5	19.5	19.0	24.5	23.5	22.0	21.5
4	6.0	5.0	15.5	13.5	20.0	17.5	19.5	17.5	24.5	23.5	21.5	20.0
5	6.0	5.5	14.5	12.5	20.5	18.5	18.0	17.0	24.5	21.5	21.0	18.5
6	6.5	5.0	14.5	12.5	20.5	19.0	17.0	16.0	22.5	20.5	19.5	18.0
7	6.5	5.0	15.0	14.0	19.5	17.5	17.0	14.5	22.5	21.5	20.5	19.0
8	5.0	3.5	15.0	14.0	19.5	17.0	17.5	15.5	23.0	22.5	20.5	20.0
9	4.0	2.5	14.0	11.5	19.5	18.0	19.5	17.0	23.0	21.0	21.0	20.0
10	5.5	3.0	12.0	9.5	19.0	18.0	20.5	19.0	21.5	20.0	21.0	19.5
11	8.5	5.5	14.0	12.0	18.5	16.5	21.5	19.0	21.0	19.5	20.5	18.5
12	10.5	8.0	15.5	13.5	17.0	15.5	22.5	21.0	21.0	20.0	20.0	19.0
13	13.0	10.5	16.0	15.0	17.5	16.5	22.5	21.5	22.0	20.5	21.5	20.0
14	14.5	12.5	16.0	15.0	19.0	17.5	23.0	21.5	22.0	20.5	22.0	21.0
15	14.5	12.5	17.0	16.0	20.5	18.5	23.0	22.0	22.0	21.5	22.0	20.5
16	14.5	13.5	16.5	16.0	21.0	20.0	23.0	21.5	22.0	21.0	20.5	19.5
17	---	---	16.5	15.5	21.0	19.0	22.5	21.0	21.5	20.0	21.5	20.0
18	12.0	10.5	17.0	15.5	19.5	18.0	22.5	21.5	22.5	20.5	21.5	21.0
19	12.0	11.0	18.5	16.0	20.0	18.0	23.5	21.5	23.0	21.5	21.0	19.0
20	12.0	11.5	19.0	17.5	20.5	19.5	23.5	22.0	23.0	21.5	20.0	19.5
21	11.5	9.5	20.0	17.0	20.5	20.0	24.0	22.5	22.5	21.0	20.5	19.5
22	11.0	10.0	---	---	20.0	17.5	24.0	22.5	22.0	21.0	21.0	20.5
23	12.0	10.5	---	---	17.5	15.0	25.0	23.5	22.0	21.5	21.0	19.0
24	12.0	11.0	20.5	20.0	15.0	14.0	25.5	24.5	22.5	21.5	20.0	19.0
25	11.5	10.5	20.5	18.5	14.5	14.0	25.5	24.0	23.5	22.0	20.0	20.0
26	11.5	10.0	---	---	17.0	14.5	25.0	23.0	23.5	22.5	20.5	20.0
27	11.5	10.0	---	---	18.5	16.5	23.5	23.0	23.5	22.5	20.5	20.0
28	12.0	10.0	---	---	19.5	17.5	23.0	22.0	22.5	22.0	20.0	18.5
29	12.0	10.5	---	---	20.0	19.0	23.5	21.5	23.0	21.0	19.5	18.5
30	11.5	10.5	19.5	18.5	20.0	18.5	24.0	21.5	22.5	21.0	20.0	17.5
31	---	---	18.5	17.5	---	---	24.5	22.5	22.0	20.5	---	---
MONTH	14.5	2.5	20.5	9.5	21.0	14.0	25.5	14.5	24.5	19.5	22.0	17.5
YEAR	25.5	0.0										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO

LOCATION.--Lat 41°01'53", long 80°31'10", Mahoning County, on left bank 800 ft upstream from Ohio-Pennsylvania State line, just below Lowellville, 0.9 mile downstream from gaging station at Lowellville, and 3.9 miles downstream from Yellow Creek.

DRAINAGE AREA.--1,075 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1967 to September 1972.
Water temperatures: January 1967 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,150 micromhos Feb. 13; minimum, 233 micromhos June 5.
pH: Maximum, 7.8 Mar. 18, Aug. 9; minimum, 6.0 Apr. 29.
Dissolved oxygen: Maximum, 12.2 mg/l Dec. 18; minimum 0.5 mg/l Oct. 3.
Water temperatures: Maximum, 38.0°C Aug. 24; minimum, 3.0°C Mar. 3, 4.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.												
05...	0930	360	51	17	--	--	90	--	--	--	--	--
06...	1800	350	--	--	81	0	66	130	55	1.1	--	6.9
23...	1000	290	--	--	53	0	43	150	79	1.5	--	9.8
NOV.												
02...	0830	270	60	18	--	--	100	--	--	--	--	--
03...	1700	285	--	--	78	0	64	150	68	.9	--	7.0
24...	1300	360	--	--	80	0	66	150	120	.8	--	6.2
DEC.												
02...	1300	650	66	16	92	0	75	140	81	.6	--	4.1
19...	0900	980	--	--	54	0	44	90	36	.4	--	2.4
JAN.												
01...	1000	3140	--	--	94	0	77	83	32	.3	--	2.1
06...	0900	786	53	12	--	--	57	--	--	--	--	--
29...	1230	345	--	--	76	0	62	160	100	.7	--	6.5
FEB.												
03...	0900	365	65	18	--	--	90	--	--	--	--	--
12...	1200	386	--	--	68	0	56	170	120	.9	--	3.6
19...	1330	754	--	--	68	0	56	130	91	.5	--	3.6
MAR.												
01...	1400	2210	--	--	82	0	67	120	85	.5	--	2.9
02...	1300	4080	56	12	--	--	88	--	--	--	2.0	--
15...	1235	5740	--	--	62	0	51	86	37	.3	--	2.3
APR.												
06...	1400	585	61	16	--	--	87	--	--	--	--	--
12...	1600	550	--	--	62	0	51	150	65	.7	--	5.1
24...	1700	4470	--	--	62	0	51	93	31	.3	--	2.4
MAY												
03...	0930	2460	--	--	70	0	57	91	31	.5	--	2.2
04...	1300	1580	55	14	--	--	74	--	--	--	--	--
29...	1630	502	--	--	68	0	56	120	60	9.0	--	6.5
JUNE												
08...	0915	448	61	15	--	--	88	--	--	--	.5	--
09...	1435	460	--	--	64	0	52	140	69	.9	--	6.3
23...	1900	1440	--	--	90	0	74	120	46	.7	--	2.2
JULY												
06...	0930	1410	49	17	--	--	67	--	--	--	.9	--
17...	1220	2680	--	--	113	0	93	110	30	.4	--	1.4
28...	1052	585	--	--	50	0	41	160	57	.6	--	7.8
AUG.												
02...	1615	634	--	--	65	0	53	140	57	.6	--	4.0
03...	0900	599	53	16	--	--	75	--	--	--	.7	--
23...	1120	484	--	--	72	0	59	140	64	.7	--	5.2
SEP.												
07...	0830	466	58	17	41	0	34	190	80	.8	.5	8.8
14...	1615	1170	--	--	62	0	51	100	47	.6	--	3.1

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

EXTREMES.--Period of record:

Specific conductance (1968-72): Maximum, 1,480 micromhos Feb. 5, 1971; minimum, 225 micromhos Feb. 22, 1971.

pH (1968-72): Maximum, 9.9 Jan. 26, 1969; minimum, 5.3 Mar. 11, 1969, Jan. 13, 14, 1970.

Dissolved oxygen (1968-69, 1970-72): Maximum, 13.1 mg/l Mar. 5, 1971; minimum, 0.4 mg/l Apr. 8, 1969, June 1, 2, 1971.

Water temperatures: Maximum, 39.0°C June 29, 1971; minimum, 2.0°C Feb. 21, 1971.

REMARKS.--Continuous water-quality recorder operated since January 1967. Minimum recorded pH of 3.0 occurred Jan. 24, 1967. Maximum recorded dissolved oxygen concentration of 14.2 mg/l occurred Mar. 25, 1970. Minimum recorded dissolved oxygen concentration of 0.2 mg/l occurred Feb. 3, 1967, Dec. 15-19, 1969, Jan. 13-17, 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. A special sample was collected each month as part of the Environmental Protection Agency national network. Determinations for trace metals were made on quarterly composites of the special monthly samples. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Mahoning River at Lowellville, Ohio (station 03099500, drainage area 1,073 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL RESI-DUE (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.												
05...	--	--	--	--	--	--	--	17	384	34	418	660
06...	30	--	--	--	--	200	130	--	388	--	--	632
23...	43	--	--	--	--	220	180	--	442	--	--	781
NOV.												
02...	--	--	--	--	--	--	--	7	454	22	476	756
03...	31	--	--	--	--	210	150	--	418	--	--	715
24...	27	--	--	--	--	230	160	--	492	--	--	860
DEC.												
02...	18	2.5	.85	1.0	.23	230	150	12	436	62	510	731
19...	10	--	--	--	--	140	96	--	236	--	--	412
JAN.												
01...	9.2	--	--	--	--	260	180	--	236	--	--	373
06...	--	--	--	--	--	--	--	20	360	52	412	580
29...	29	--	--	--	--	230	170	--	544	--	--	834
FEB.												
03...	--	--	--	--	--	--	--	20	524	36	560	845
12...	16	--	--	--	--	240	180	--	566	--	--	917
19...	16	--	--	--	--	200	140	--	460	--	--	720
MAR.												
01...	13	--	--	--	--	210	140	--	420	--	--	670
02...	--	.98	3.2	2.8	2.7	--	--	7	308	426	734	530
15...	10	--	--	--	--	150	99	--	260	--	--	409
APR.												
06...	--	--	--	--	--	--	--	0	404	70	474	720
12...	22	--	--	--	--	220	170	--	438	--	--	706
24...	10	--	--	--	--	160	110	--	272	--	--	411
MAY												
03...	9.7	--	--	--	--	160	100	--	258	--	--	418
04...	--	--	--	--	--	--	--	0	346	66	412	545
29...	29	--	--	--	--	200	140	--	408	--	--	616
JUNE												
08...	--	9.2	1.6	.73	.73	--	--	1	424	22	446	680
09...	28	--	--	--	--	210	160	--	414	--	--	709
23...	9.6	--	--	--	--	200	130	--	336	--	--	566
JULY												
06...	--	2.3	2.1	.72	--	--	--	1	310	62	372	480
17...	6.3	--	--	--	--	190	98	--	280	--	--	448
28...	35	--	--	--	--	210	170	--	406	--	--	622
AUG.												
02...	18	--	--	--	--	200	150	--	358	--	--	574
03...	--	5.0	2.2	.53	--	--	--	8	374	58	432	595
23...	23	--	--	--	--	210	150	--	430	--	--	648
SEP.												
07...	39	7.2	1.1	.48	.48	210	180	15	440	50	480	678
14...	14	--	--	--	--	180	130	--	296	--	--	504

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	PHENOLS (UG/L)	CYANIDE (CN) (MG/L)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TUR-BID-ITY (JTU)	OIL-GREASE (SEVER-ITY)
OCT.												
05...	27.0	18.0	3	.02	2.0	25	20	43	110000	8800	10	1
06...	28.0	--	--	--	--	--	--	--	--	--	--	--
23...	27.0	--	--	--	--	--	--	--	--	--	--	--
NOV.												
02...	26.5	22.0	8	.02	2.2	27	6.6	26	210000	16000	10	1
03...	25.0	--	--	--	--	--	--	--	--	--	--	--
24...	15.0	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	13.0	1.0	45	.04	6.7	63	9.0	41	380000	46000	20	1
19...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
01...	7.0	--	--	--	--	--	--	--	--	--	--	--
06...	9.0	-2.0	87	.03	9.0	78	13	46	82000	8400	25	--
29...	12.0	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	17.0	4.5	47	.00	4.7	48	9.3	42	15000	3800	20	1
12...	14.0	--	--	--	--	--	--	--	--	--	--	--
19...	8.0	--	--	--	--	--	--	--	--	--	--	--
MAR.												
01...	9.0	--	--	--	--	--	--	--	--	--	--	--
02...	6.0	-1.0	32	.03	8.4	67	23	59	76000	9000	60	2
15...	6.0	--	--	--	--	--	--	--	--	--	--	--
APR.												
06...	17.0	18.0	49	.10	6.8	70	9.6	38	19000	3400	20	2
12...	21.0	--	--	--	--	--	--	--	--	--	--	--
24...	14.0	--	--	--	--	--	--	--	--	--	--	--
MAY												
03...	18.0	--	--	--	--	--	--	--	--	--	--	--
04...	20.0	15.0	11	.04	6.8	74	6.0	30	43000	14000	20	1
29...	32.0	--	--	--	--	--	--	--	--	--	--	--
JUNE												
08...	30.5	19.0	12	.09	3.0	39	7.5	31	26000	1800	7	1
09...	33.0	--	--	--	--	--	--	--	--	--	--	--
23...	22.0	--	--	--	--	--	--	--	--	--	--	--
JULY												
06...	23.0	16.0	9	.12	5.6	64	7.6	43	66000	5800	20	1
17...	25.0	--	--	--	--	--	--	--	--	--	--	--
28...	30.5	--	--	--	3.1	41	--	--	--	--	--	--
AUG.												
02...	33.0	--	--	--	--	--	--	--	--	--	--	--
03...	32.0	27.0	5	.04	2.7	36	6.4	32	54000	21000	15	1
23...	34.0	--	--	--	--	--	--	--	--	--	--	--
SEP.												
07...	30.5	17.5	10	.02	2.4	32	5.8	32	27000	5400	15	1
14...	28.5	--	--	--	--	--	--	--	--	--	--	--

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)
OCT.					
06...	--	--	--	720	360
20...	0	<.5	9.0	--	--
NOV.					
03...	--	--	--	600	300
24...	--	--	--	670	410
JAN.					
01...	--	--	--	1200	230
29...	--	--	--	1500	420
FEB.					
12...	--	--	--	1300	380
19...	--	--	--	2100	390
MAR.					
01...	--	--	--	5400	480
APR.					
12...	--	--	--	1600	370
24...	--	--	--	530	160
MAY					
03...	--	--	--	2000	410
29...	--	--	--	1100	390
JUNE					
08...	--	.6	8.0	--	--
09...	--	--	--	1300	420
23...	--	--	--	2600	470

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)
Oct. 5-Dec. 2...	1	0	14	8	27
Jan. 6-Mar. 2...	0	0	25	10	33
Apr. 6-June 8...	0	0	19	6	24
July 6-Sept. 7..	3	3	24	0	24

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	696	654	780	723	750	566	377	295	860	819	761	614
2	707	659	803	760	747	725	427	341	848	804	614	443
3	695	666	788	752	740	710	461	386	858	816	449	389
4	680	663	785	738	738	701	470	373	875	782	450	390
5	694	662	815	779	758	695	665	410	897	806	509	450
6	679	651	827	795	786	620	662	551	840	785	618	501
7	665	631	795	741	690	545	639	591	---	---	716	618
8	672	629	815	735	558	405	651	632	---	---	675	530
9	679	625	816	782	405	356	695	645	848	827	531	491
10	622	509	801	759	468	369	719	663	915	830	533	485
11	617	599	839	753	503	447	690	537	929	881	588	519
12	606	562	813	749	516	486	662	533	996	888	636	551
13	664	601	818	792	539	516	657	618	1150	872	623	509
14	726	664	813	770	564	495	749	621	1090	866	558	399
15	697	661	831	767	543	500	777	651	1020	845	399	384
16	709	662	806	750	506	410	703	663	845	788	459	387
17	727	682	810	768	410	371	782	703	798	683	485	459
18	722	681	806	762	564	374	816	782	714	651	473	453
19	721	679	786	717	561	467	840	791	774	542	513	468
20	740	686	756	626	581	510	833	791	795	762	555	486
21	776	701	779	719	561	531	833	806	845	786	585	524
22	778	714	774	641	552	516	827	801	1120	806	581	494
23	794	746	716	522	555	500	813	726	890	788	527	488
24	800	735	822	492	578	516	759	708	890	695	488	456
25	807	738	888	711	611	564	735	653	914	864	470	452
26	782	737	935	663	665	591	708	660	947	872	---	---
27	773	705	848	555	683	638	720	668	947	879	465	438
28	744	703	833	755	686	648	761	674	885	858	507	447
29	780	720	794	710	695	657	839	558	864	753	573	495
30	817	734	713	609	693	438	815	782	---	---	593	546
31	788	747	---	---	486	332	834	776	---	---	648	582
MONTH	817	509	935	492	786	332	840	295	1150	542	761	384

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	638	611	578	359	680	383	606	584	599	576	678	650
2	657	618	600	548	726	380	606	564	612	588	695	594
3	674	626	548	335	674	507	597	465	651	602	---	---
4	674	606	585	542	585	275	530	495	665	618	572	552
5	611	457	602	530	741	233	519	476	632	615	636	563
6	699	662	596	561	731	627	513	471	632	608	632	482
7	671	524	620	573	761	566	503	479	639	611	690	600
8	689	636	630	597	689	658	522	465	648	591	687	657
9	699	657	638	596	738	689	537	503	711	606	695	642
10	725	653	635	537	716	625	530	482	674	638	678	641
11	725	693	536	498	734	686	566	509	671	633	690	632
12	768	710	566	486	732	639	587	545	662	638	669	609
13	750	630	591	545	676	569	555	504	663	612	657	498
14	670	623	617	570	644	566	575	504	680	623	609	480
15	635	380	617	588	640	529	561	509	672	615	605	542
16	380	278	594	557	628	436	545	375	701	612	647	588
17	405	278	557	498	657	582	468	410	681	632	641	605
18	450	404	542	498	673	592	456	422	674	623	623	398
19	495	401	555	455	721	603	491	420	669	630	578	533
20	489	444	578	303	726	637	527	479	642	602	560	452
21	458	434	636	476	683	513	537	504	665	606	506	443
22	434	410	707	474	614	450	548	503	627	621	561	506
23	452	434	698	645	566	399	534	504	636	608	560	528
24	453	420	695	650	509	402	563	501	633	611	587	534
25	455	426	702	657	---	---	542	507	663	552	549	528
26	476	351	731	684	601	567	581	521	666	596	579	539
27	482	431	731	690	614	557	602	572	617	494	539	510
28	507	401	725	680	641	590	633	588	660	489	546	515
29	521	471	696	650	639	560	635	618	632	569	551	525
30	540	489	684	641	626	560	641	591	672	588	540	444
31	---	---	689	579	---	---	614	578	675	615	---	---
MONTH	768	278	731	303	761	233	641	375	711	489	695	398
YEAR	1150	233										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.9	6.7	6.9	6.8	6.9	6.8	7.0	6.7	7.1	7.0	7.3	7.0
2	7.0	6.8	6.8	6.7	7.0	6.9	6.9	6.7	7.1	7.0	7.6	7.0
3	7.0	6.9	6.9	6.7	7.0	6.8	6.9	6.5	7.1	7.0	7.5	7.0
4	7.1	6.8	6.8	6.7	6.9	6.7	6.7	6.6	7.1	7.1	7.3	7.0
5	7.0	6.8	6.8	6.7	6.9	6.7	6.9	6.5	7.1	7.1	7.1	7.1
6	6.9	6.8	6.9	6.7	7.0	6.7	6.9	6.6	7.1	7.1	7.2	6.8
7	6.9	6.8	6.9	6.8	7.1	6.9	6.8	6.5	---	---	7.0	6.8
8	6.9	6.7	6.9	6.8	7.2	7.0	7.0	6.6	---	---	7.2	6.9
9	7.3	6.6	6.8	6.7	7.2	6.7	7.0	6.9	7.4	6.9	7.3	7.0
10	7.0	6.8	6.7	6.5	6.8	6.6	6.9	6.4	7.5	7.1	7.1	6.7
11	7.0	6.7	6.7	6.4	6.8	6.6	6.7	6.5	7.4	7.0	7.2	6.8
12	6.9	6.6	6.7	6.7	6.9	6.7	6.8	6.4	7.2	7.0	7.2	7.0
13	7.0	6.8	6.9	6.6	6.8	6.4	6.8	6.5	7.3	7.0	7.3	7.0
14	6.9	6.8	6.9	6.8	6.8	6.7	6.8	6.5	7.3	7.0	7.2	7.1
15	6.9	6.8	6.8	6.7	7.0	6.8	7.1	6.7	7.2	7.0	7.2	6.9
16	7.2	6.8	6.8	6.7	7.0	6.8	---	---	7.3	7.0	7.4	7.1
17	6.9	6.8	6.7	6.6	7.0	6.7	6.8	6.7	7.2	7.0	7.7	7.4
18	6.9	6.6	6.7	6.6	7.0	6.9	6.8	6.6	7.1	6.9	7.8	7.3
19	6.8	6.7	6.8	6.7	7.0	6.9	6.8	6.6	7.4	6.9	7.7	7.4
20	6.9	6.7	6.9	6.7	7.0	6.8	6.8	6.5	7.3	7.3	7.7	7.2
21	6.9	6.8	6.9	6.9	7.2	6.7	7.3	6.6	7.5	7.0	7.6	7.2
22	6.9	6.7	6.9	6.7	6.9	6.6	6.9	6.6	7.2	6.9	7.3	7.2
23	6.9	6.6	6.8	6.7	6.8	6.7	7.0	6.8	7.1	7.0	7.2	7.0
24	6.9	6.7	6.8	6.7	6.9	6.6	7.0	6.8	7.1	6.9	7.2	6.9
25	6.8	6.7	6.9	6.6	6.9	6.7	6.9	6.7	7.3	6.9	7.2	7.1
26	6.8	6.7	6.9	6.8	7.0	6.6	7.1	6.7	7.7	7.0	---	---
27	6.8	6.6	7.0	6.8	7.0	6.7	7.1	7.0	7.5	7.2	7.5	7.1
28	6.8	6.7	7.0	6.9	6.9	6.8	7.1	7.1	7.3	7.0	7.7	7.2
29	6.9	6.7	6.9	6.8	6.9	6.6	7.1	7.0	7.2	6.9	7.6	7.4
30	6.9	6.7	7.0	6.9	7.0	6.7	7.1	7.1	---	---	7.6	7.3
31	7.0	6.7	---	---	7.1	6.9	7.1	7.1	---	---	7.4	7.0
MONTH	7.3	6.6	7.0	6.4	7.2	6.4	7.3	6.4	7.7	6.9	7.8	6.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.4	7.0	7.6	7.0	7.1	6.7	7.2	6.9	7.1	6.9	7.0	6.8
2	7.4	7.3	7.2	6.8	7.1	6.9	7.2	6.9	7.0	6.7	7.0	6.8
3	7.6	7.1	7.6	7.0	7.1	6.9	7.1	6.9	7.1	6.8	7.0	6.8
4	7.2	7.0	7.3	7.1	7.1	6.9	7.0	6.8	7.0	6.8	7.1	6.9
5	7.3	7.0	7.3	6.9	7.1	6.9	7.0	6.8	7.1	6.8	7.0	6.7
6	7.3	7.1	7.4	7.0	7.1	7.0	7.4	6.9	7.2	7.0	7.1	6.8
7	7.4	7.1	7.3	7.1	7.2	7.0	7.0	6.8	7.2	7.1	7.2	6.8
8	7.5	7.3	7.2	7.1	7.2	7.0	7.2	6.8	7.1	7.0	7.2	6.9
9	7.5	7.3	7.1	6.7	7.3	7.0	7.1	6.8	7.8	7.0	7.3	7.1
10	7.5	7.1	7.1	7.0	7.3	7.2	7.1	7.0	7.3	7.0	7.3	7.2
11	7.2	7.0	7.2	6.9	7.3	7.2	7.1	6.9	7.3	7.0	7.3	6.9
12	7.2	6.9	7.1	6.8	7.3	7.2	7.0	6.9	7.1	7.0	7.2	6.7
13	7.3	7.1	6.9	6.8	7.3	7.2	7.2	6.7	7.1	7.0	7.1	7.0
14	7.4	7.2	7.2	6.9	7.3	7.3	7.1	6.6	7.1	7.0	7.1	6.9
15	7.6	7.0	7.1	6.9	7.3	7.3	7.3	6.9	7.0	6.9	7.2	7.0
16	7.7	7.5	6.9	6.8	7.3	7.2	7.1	6.9	7.0	6.8	7.2	7.0
17	7.7	7.2	7.0	6.8	7.3	7.3	7.4	7.0	7.0	6.9	7.3	7.2
18	7.7	7.3	7.0	6.8	7.3	7.3	7.2	6.7	7.0	6.9	7.3	7.1
19	7.4	7.2	7.0	6.8	7.3	7.3	7.1	6.9	7.0	6.9	7.2	7.1
20	7.5	7.2	7.1	6.9	7.3	7.2	7.1	6.9	7.1	6.9	7.2	6.9
21	7.6	7.1	7.2	7.0	7.3	7.2	7.0	6.8	7.1	7.0	7.1	6.9
22	7.4	7.3	7.1	6.9	7.3	7.2	7.1	6.6	7.1	7.0	7.1	7.0
23	7.6	7.4	7.0	6.9	7.3	7.0	7.0	6.9	7.1	6.9	7.3	7.0
24	7.4	7.1	7.0	6.8	7.1	7.0	7.1	6.7	7.0	6.9	7.3	6.7
25	7.3	7.2	7.0	6.9	7.1	7.0	7.0	6.9	7.0	6.8	7.2	7.0
26	7.3	7.2	7.4	6.8	7.2	7.0	7.3	6.9	7.1	6.9	7.1	6.9
27	7.3	7.1	7.0	6.9	7.2	6.9	7.1	6.9	7.1	7.0	7.2	6.8
28	7.3	6.9	7.1	6.9	7.0	6.8	7.0	6.7	7.2	6.9	7.2	7.0
29	7.5	6.0	7.1	6.9	7.0	6.7	7.1	6.9	7.1	6.9	7.2	7.0
30	7.6	7.3	7.0	6.8	7.1	6.9	7.2	7.0	7.1	6.9	7.5	7.0
31	---	---	7.1	6.9	---	---	7.1	6.9	7.0	6.9	---	---
MONTH	7.7	6.0	7.6	6.7	7.3	6.7	7.4	6.6	7.8	6.7	7.5	6.7
YEAR	7.8	6.0										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.4	0.9	2.9	2.3	7.1	6.2	7.2	6.4	3.1	2.3	9.2	4.4
2	1.4	0.8	2.6	1.3	6.6	5.9	7.4	5.8	4.9	2.8	8.8	8.2
3	1.5	0.5	2.3	1.2	6.1	4.5	6.8	3.9	4.7	3.6	8.7	7.4
4	2.5	1.5	2.9	1.9	5.9	4.3	4.5	1.5	5.3	4.1	9.6	7.2
5	2.9	1.6	3.1	1.9	6.1	5.4	9.3	1.0	7.5	5.2	9.6	8.8
6	2.3	1.7	3.2	2.0	6.0	5.4	10.5	8.1	6.3	5.3	9.0	7.9
7	2.4	2.1	3.7	2.7	7.3	2.8	9.5	8.6	---	---	7.9	7.1
8	3.0	2.2	3.7	2.5	8.7	4.9	9.5	7.9	---	---	8.8	7.4
9	4.1	2.5	3.2	2.7	9.6	8.7	8.4	5.1	6.2	5.0	8.9	8.5
10	3.2	1.9	4.2	3.0	9.6	8.1	5.3	3.0	5.6	4.1	8.6	8.0
11	3.2	2.4	4.4	3.7	9.7	8.0	4.1	2.7	4.1	3.2	9.9	7.4
12	2.6	1.8	4.1	3.2	9.7	8.9	8.3	2.5	4.7	3.3	9.3	8.5
13	2.3	1.3	4.4	3.3	9.2	7.2	7.3	5.6	6.3	4.5	9.5	7.9
14	2.3	0.9	4.9	3.8	10.0	5.6	8.1	5.4	6.9	6.3	8.1	6.8
15	2.1	1.3	4.2	3.2	10.6	6.8	7.8	6.7	6.4	5.1	11.3	8.1
16	4.5	1.0	3.7	3.2	10.2	8.1	---	---	7.7	5.1	11.2	10.3
17	---	---	4.4	3.3	9.1	6.9	8.6	6.4	7.8	6.8	10.9	9.9
18	---	---	4.7	3.7	12.2	8.6	6.6	4.7	6.9	6.0	11.2	9.8
19	---	---	3.7	3.4	12.1	9.6	4.7	3.7	10.0	5.6	11.3	10.5
20	4.5	2.0	5.1	3.4	10.6	8.3	3.7	3.0	9.0	8.1	10.8	7.5
21	4.0	2.4	5.8	5.0	8.3	6.2	3.2	2.9	8.1	6.6	8.0	6.8
22	2.8	2.2	6.4	5.8	11.9	5.5	5.1	2.8	6.6	6.2	9.4	6.4
23	3.4	2.2	6.2	5.8	11.3	8.6	5.6	4.3	7.6	5.7	9.9	9.3
24	2.7	2.3	6.5	5.9	8.8	6.7	5.0	4.1	7.4	6.4	9.8	9.1
25	2.6	2.3	6.1	5.3	6.7	4.8	4.5	3.3	8.2	6.8	9.2	9.0
26	2.5	2.1	5.8	5.3	7.8	3.8	7.4	4.1	8.2	6.8	---	---
27	3.7	2.2	7.1	5.3	8.3	6.6	7.0	5.2	7.6	6.5	11.4	10.1
28	3.4	2.3	7.2	6.5	6.6	5.7	5.4	3.8	6.5	5.0	10.1	8.9
29	2.9	2.1	7.2	6.7	6.3	4.3	5.9	3.8	5.0	4.3	9.4	8.9
30	3.2	2.0	7.1	6.4	7.7	5.3	5.0	4.6	---	---	9.6	9.1
31	3.1	2.1	---	---	8.0	7.0	4.6	2.9	---	---	9.8	8.9
MONTH	4.5	0.5	7.2	1.2	12.2	2.8	10.5	1.0	10.0	2.3	11.4	4.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.7	8.8	9.2	5.6	3.0	2.1	3.5	3.1	3.8	2.9	3.7	2.2
2	9.8	9.1	7.1	5.7	2.8	1.5	3.4	2.8	3.7	2.7	---	---
3	9.7	7.2	7.7	5.1	2.4	1.4	3.1	1.9	3.9	3.0	---	---
4	8.4	7.4	7.1	6.0	1.6	0.9	2.4	2.0	4.4	3.2	---	---
5	8.9	6.6	6.9	5.7	2.0	1.1	5.5	1.9	4.4	3.6	3.3	2.2
6	6.8	6.4	6.4	5.6	2.2	1.8	5.8	4.9	3.8	3.5	2.4	2.0
7	6.7	6.2	6.0	5.5	2.7	1.9	5.6	5.0	3.9	2.4	3.4	2.4
8	7.8	5.9	7.0	5.2	2.9	2.1	5.4	3.7	3.7	2.9	2.8	2.1
9	7.8	5.8	7.0	6.2	2.5	1.5	3.8	2.8	3.8	3.1	2.9	1.2
10	5.6	4.3	7.7	7.0	1.9	1.4	4.5	2.1	3.8	2.8	2.5	2.1
11	6.1	4.1	7.0	4.5	2.2	1.4	2.9	1.9	3.9	2.6	3.5	2.1
12	5.6	4.4	5.5	3.7	2.9	1.6	3.6	1.7	3.8	3.2	2.9	2.6
13	6.8	4.5	5.0	3.8	2.2	1.3	3.6	2.1	3.9	2.7	3.5	1.7
14	6.0	4.7	4.2	3.6	3.0	1.3	3.8	2.2	3.3	2.5	4.3	2.6
15	6.7	3.7	4.9	3.3	2.4	1.3	3.3	2.7	3.6	2.8	4.0	3.2
16	5.0	3.2	4.5	3.3	3.3	1.5	2.8	1.5	3.6	1.3	3.2	2.4
17	7.5	3.5	5.0	3.0	2.9	2.4	5.3	2.5	2.5	2.1	---	---
18	7.8	6.8	4.5	3.9	2.5	2.0	4.4	3.8	3.7	2.2	---	---
19	7.3	5.9	4.8	3.9	3.0	2.3	4.3	3.5	3.8	3.1	---	---
20	6.8	5.7	4.2	3.6	3.2	2.5	4.7	3.9	3.8	3.0	---	---
21	7.6	5.6	3.7	3.2	3.5	2.5	4.6	3.8	3.7	2.2	---	---
22	7.7	7.0	4.0	2.8	2.8	2.7	4.0	3.6	2.8	1.8	---	---
23	7.0	5.9	3.4	2.8	---	---	4.0	3.6	4.4	2.3	---	---
24	7.9	5.8	3.7	2.5	---	---	4.1	3.0	3.6	2.8	---	---
25	8.0	7.3	4.2	3.2	---	---	3.8	3.3	3.7	2.2	---	---
26	8.3	6.6	4.0	2.4	6.9	5.7	4.0	3.3	3.4	2.4	---	---
27	8.1	7.1	3.1	2.6	5.7	3.8	3.6	3.2	3.5	3.0	---	---
28	8.5	6.9	2.7	2.2	4.3	3.2	3.4	3.0	3.8	2.7	---	---
29	8.8	7.4	3.6	2.1	3.6	3.0	4.0	3.3	3.0	1.9	---	---
30	7.5	5.7	2.7	1.5	4.1	2.8	3.9	3.5	3.8	2.0	---	---
31	---	---	2.8	0.7	---	---	4.0	3.3	3.7	2.0	---	---
MONTH	9.8	3.2	9.2	0.7	6.9	0.9	5.8	1.5	4.4	1.3	---	---
YEAR	12.2	0.5										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	31.0	29.0	26.5	25.0	15.0	13.5	6.5	5.0	16.5	14.0	10.5	7.5
2	30.0	28.5	28.5	25.5	15.0	13.0	7.5	6.5	16.0	15.0	7.5	4.0
3	29.5	27.5	27.5	24.0	15.0	13.0	9.0	6.5	18.0	15.5	4.0	3.0
4	29.0	28.0	24.0	22.5	15.0	14.0	11.5	9.0	15.5	12.5	4.0	3.0
5	28.5	27.0	24.0	23.0	14.0	13.0	11.5	9.5	12.5	11.0	5.5	4.0
6	27.5	26.5	24.0	20.5	15.0	12.0	11.0	8.5	12.0	10.5	8.5	4.5
7	26.5	24.0	20.5	17.0	13.5	10.0	11.0	9.5	---	---	10.5	8.5
8	25.5	23.5	19.0	17.0	10.0	8.5	11.5	10.0	---	---	9.0	4.5
9	25.0	23.0	19.5	18.0	10.0	8.5	12.5	10.0	14.0	13.0	4.5	4.0
10	23.5	21.0	19.5	17.5	14.0	10.0	14.5	11.5	15.0	12.5	6.0	4.5
11	23.5	21.0	20.0	18.5	14.5	13.0	14.5	12.5	17.0	14.5	7.5	5.5
12	23.0	21.0	22.5	20.5	14.0	12.5	14.5	12.5	17.5	15.5	9.0	7.5
13	24.5	21.5	22.5	20.5	14.0	13.0	14.0	13.0	17.0	10.5	8.5	7.5
14	25.5	24.0	20.5	19.5	14.0	12.5	13.5	11.5	11.0	9.5	7.5	6.5
15	26.5	23.5	22.5	20.5	12.5	11.0	12.0	8.0	11.0	10.0	6.5	5.5
16	26.5	25.0	23.5	21.5	11.0	10.0	---	---	10.0	8.0	7.0	6.0
17	26.0	24.5	23.5	22.5	10.0	9.5	11.0	9.0	9.5	7.0	6.5	6.5
18	25.0	23.5	25.5	23.0	9.5	8.0	15.0	11.0	9.5	8.0	6.5	6.0
19	26.0	23.5	26.5	23.5	8.0	7.5	16.5	15.0	10.0	7.5	7.0	5.5
20	25.5	24.0	23.5	19.5	9.5	8.0	19.5	16.5	7.5	6.5	7.5	5.5
21	27.0	25.0	19.5	16.0	11.0	9.5	19.5	18.0	10.5	7.5	9.0	6.5
22	26.5	25.5	16.0	14.0	11.5	9.5	18.5	18.0	10.5	9.0	9.5	8.0
23	27.0	26.0	16.0	14.5	11.0	9.0	18.0	15.0	10.5	9.0	8.0	6.0
24	27.0	25.5	16.5	14.5	13.0	11.0	15.0	13.5	12.0	10.5	6.0	5.5
25	26.0	25.0	17.0	15.5	13.0	12.0	14.5	11.0	13.5	12.0	5.5	5.0
26	27.0	24.5	17.5	16.0	15.0	12.0	11.5	10.5	13.5	11.5	---	---
27	27.0	26.0	16.5	16.0	15.0	13.0	13.5	10.5	13.0	11.0	9.0	8.5
28	28.0	26.5	16.0	15.5	15.0	13.5	14.0	12.5	12.0	10.5	12.0	8.5
29	28.5	27.0	16.0	14.0	15.0	13.5	13.5	13.0	11.5	10.5	12.5	10.5
30	28.5	26.5	14.0	12.5	14.5	8.5	13.5	11.5	---	---	13.5	11.5
31	26.5	24.5	---	---	8.5	6.5	14.0	10.5	---	---	15.0	12.0
MONTH	31.0	21.0	28.5	12.5	15.0	6.5	19.5	5.0	18.0	6.5	15.0	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	19.5	16.5	28.5	26.5	31.0	27.5	34.0	31.0	36.5	33.5
2	15.0	14.0	22.0	18.5	29.0	27.5	29.5	28.0	34.5	32.5	35.5	33.5
3	16.0	13.5	21.0	18.0	30.0	26.0	28.0	25.0	35.0	33.0	---	---
4	16.0	14.0	20.5	19.5	31.0	28.0	26.0	24.5	34.5	32.5	30.5	29.5
5	18.0	14.5	20.5	18.5	32.5	27.5	25.0	23.0	33.0	30.5	30.5	28.5
6	19.5	17.0	22.0	19.5	31.0	30.0	23.5	22.0	31.5	30.0	33.0	29.5
7	18.0	15.0	22.0	20.5	33.5	29.5	24.0	22.5	32.5	30.0	33.5	30.5
8	15.0	13.5	22.0	21.0	34.5	30.5	26.0	23.0	31.5	30.0	32.5	32.0
9	16.0	13.0	22.0	20.5	33.5	32.0	27.5	25.0	31.0	30.0	32.0	30.5
10	19.0	14.5	20.5	17.5	32.0	28.5	29.5	26.5	32.0	29.5	30.5	29.0
11	22.0	18.0	19.5	16.0	29.5	27.0	32.0	28.5	32.5	30.0	31.0	28.0
12	25.0	21.0	22.5	18.0	30.5	27.0	33.0	30.0	32.5	30.5	31.0	30.0
13	24.5	20.5	23.0	21.0	30.0	28.5	30.5	27.5	33.5	30.0	32.0	29.0
14	21.0	19.5	23.0	21.5	32.5	28.5	30.5	28.0	34.0	31.5	31.5	27.5
15	20.5	13.5	24.0	22.0	34.0	30.5	30.0	29.0	33.5	32.0	29.5	27.0
16	16.5	14.0	23.5	22.5	31.0	29.0	29.5	25.0	34.5	31.5	29.5	27.5
17	14.0	13.5	23.5	22.5	30.5	29.0	27.0	24.5	34.5	33.0	30.0	28.5
18	16.5	13.0	25.0	21.5	31.0	28.5	28.5	26.0	35.5	33.0	29.0	23.5
19	16.5	16.0	26.5	23.0	33.5	29.0	30.5	28.0	35.0	33.0	28.0	26.0
20	16.0	13.5	27.5	25.0	33.5	32.5	31.5	29.0	34.5	32.0	27.0	25.0
21	13.5	12.5	29.0	26.0	33.0	30.0	32.0	29.5	36.0	32.0	27.0	24.0
22	13.0	12.5	31.5	27.5	30.0	27.0	32.0	30.5	36.0	33.5	27.0	26.0
23	13.5	12.0	32.0	28.0	27.0	22.0	32.0	30.0	36.5	34.5	26.5	24.5
24	14.0	13.0	34.0	[illegible]	23.0	19.5	32.0	29.5	38.0	35.0	25.0	24.0
25	14.0	13.0	33.5	31.0	20.5	19.0	31.5	30.0	37.5	35.5	26.0	23.5
26	14.5	13.0	32.0	30.0	23.0	20.0	31.5	29.5	36.5	35.0	28.0	25.5
27	14.5	13.5	31.0	29.0	25.5	22.5	31.5	30.5	35.5	33.5	26.5	25.5
28	15.5	14.0	31.0	28.0	28.0	25.0	33.0	30.0	35.0	32.5	26.0	25.0
29	16.0	14.5	32.0	27.5	29.5	27.0	32.5	31.0	35.5	33.0	26.0	24.5
30	17.5	15.5	31.0	28.5	28.5	27.0	32.5	30.5	36.0	32.5	26.0	21.0
31	---	---	29.5	28.0	---	---	32.0	30.0	36.0	33.5	---	---
MONTH	25.0	12.0	34.0	16.0	34.5	19.0	33.0	22.0	38.0	29.5	36.5	21.0
YEAR	38.0	3.0										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO

LOCATION.--Lat 40°43'36", long 81°31'47", Stark County, on left bank at Navarre water treatment plant, 800 ft upstream from bridge on Elton Road at Navarre, 3.5 miles downstream from gaging station at Massillon, 1.2 miles downstream from Pigeon Run, and just upstream from Wolf Creek.

DRAINAGE AREA.--534 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1968 to September 1972.
Water temperatures: March 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 10,900 micromhos Oct. 24; minimum, 689 micromhos July 16.
pH: Maximum, 10.7 Oct. 27; minimum, 6.0 Nov. 23, Dec. 16.
Dissolved oxygen: Maximum, 11.8 mg/l Mar. 9; minimum, 0.0 mg/l May 3, 27, June 7.
Water temperatures: Maximum, 29.5°C July 23; minimum, 0.5°C Jan. 15, Feb. 5.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
14...	1600	119	82	0	71	2400	1.4	2.7
18...	1100	105	170	0	50	3300	.5	1.8
27...	1340	--	--	--	--	--	--	--
NOV.								
06...	1000	105	168	0	62	2900	1.1	.90
30...	1205	179	162	0	90	1800	1.1	1.3
DEC.								
04...	1000	103	174	0	94	1700	1.5	2.3
08...	1500	463	130	0	120	860	1.8	2.8
JAN.								
01...	1340	818	148	0	110	400	.5	4.1
22...	1600	192	124	0	140	2200	.9	6.0
FEB.								
04...	1145	202	120	0	150	1900	4.9	3.6
15...	1500	515	172	0	110	760	.4	3.4
MAR.								
07...	1000	521	122	0	120	1700	.6	3.0
24...	1136	775	102	0	97	370	.8	3.9
APR.								
05...	1030	355	116	0	130	1460	1.8	4.1
22...	1200	2460	110	0	80	200	.7	3.0
MAY								
11...	1035	740	150	0	96	500	1.5	3.2
25...	0900	176	122	0	130	2100	1.5	3.6
JUNE								
05...	1330	--	--	--	--	--	--	--
16...	1200	303	114	0	140	2600	1.8	2.9
30...	1530	730	165	0	120	630	1.1	4.1
JULY								
05...	1445	635	190	0	89	570	.5	2.2
18...	1110	2100	127	0	65	210	.4	4.2
AUG.								
08...	0830	139	130	0	75	3000	1.8	1.5
28...	0900	270	146	0	95	960	.5	2.8
SEP.								
08...	0855	137	145	0	89	2400	.5	2.6
15...	0930	1300	164	0	70	290	.5	1.0

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-72): Maximum, 16,700 micromhos Jan. 27, 1970; minimum, 450 micromhos June 13, 1970.
pH (1968-69, 1970-72): Maximum, 10.7 Oct. 27, 1971; minimum, 4.6 Aug. 17, 1969.
Dissolved oxygen (1970-72): Maximum, 11.8 mg/l Mar. 9, 1972; minimum, 0.0 mg/l on several days during 1971 and 1972.
Water temperatures (1968-69, 1970-72): Maximum, 30.0°C June 27, 28, 1969; minimum, freezing point on several days during 1968 and 1969.

REMARKS.--Continuous water-quality recorder operated since March 1968. Minimum recorded specific conductance value of 240 micromhos occurred July 5, 1969. Minimum recorded pH of 3.9 occurred Oct. 26, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Tuscarawas River at Massillon, Ohio (station 03117000, drainage area 518 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVEU SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
14...	12	4620	1500	1400	7920	--	--
18...	8.0	5840	2000	1800	9710	--	--
27...	--	--	--	--	--	<.5	15
NOV.							
06...	3.9	5480	1900	1760	8480	--	--
30...	5.6	3760	1460	1330	5700	--	--
DEC.							
04...	10	3500	1130	990	5200	--	--
08...	12	1940	820	710	3000	--	--
JAN.							
01...	18	1040	470	350	1660	--	--
22...	26	4100	1500	1400	6740	--	--
FEB.							
04...	16	4070	1400	1300	6010	--	--
15...	15	2040	700	560	2730	--	--
MAR.							
07...	14	3310	770	670	5480	--	--
24...	17	982	430	350	1600	--	--
APR.							
05...	18	2580	1300	1200	4490	--	--
22...	13	562	290	200	940	--	--
MAY							
11...	14	1160	520	400	1940	--	--
25...	16	3680	1400	1300	6210	--	--
JUNE							
05...	--	--	--	--	--	<.5	5.0
16...	13	4660	2100	2000	7810	--	--
30...	18	1450	630	490	2430	--	--
JULY							
05...	9.8	1400	540	380	2140	--	--
18...	19	682	280	180	997	--	--
AUG.							
08...	6.8	5200	2100	2000	7950	--	--
28...	12	2020	800	680	3060	--	--
SEP.							
08...	11	4440	1700	1600	6860	--	--
15...	4.6	886	380	240	1270	--	--

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6610	5830	9600	8160	5940	4110	2110	1510	7020	5130	3570	2460
2	8370	6600	9150	7980	4910	4070	3150	2110	6910	5680	5160	2310
3	9000	6390	9270	7830	5960	4910	3120	2460	6360	5760	---	---
4	8010	6600	9690	7410	6070	5140	3200	2510	6350	4790	---	---
5	9100	7050	8880	7410	7540	6070	3040	2500	4850	3620	---	---
6	9350	8600	10400	6000	7880	4820	2710	2260	6050	4850	---	---
7	10800	9150	8340	6210	6230	3050	3640	2710	6200	4700	6350	5400
8	10100	7950	8970	6570	3590	2570	4790	3590	6290	5360	5900	3900
9	10000	7750	9180	7320	3450	2550	4310	3800	6290	5300	3950	3500
10	9720	7200	9180	7410	3970	3310	5300	3800	6230	5450	6000	3350
11	9460	6190	8130	7080	4820	3800	4300	3150	6160	5590	4400	3200
12	7740	6870	7830	6900	4040	3230	4500	2040	6250	5440	7000	4300
13	8200	6850	7860	6840	3930	3540	3120	2340	5780	4190	5850	2300
14	8070	6870	7890	7020	4390	2800	5210	2630	5660	2210	2600	2300
15	8370	7110	8310	7170	4230	2040	4670	3590	3210	2070	2850	2550
16	9390	7170	8070	7020	2170	1360	---	---	3340	2410	3150	2850
17	9080	8210	8130	6420	2850	1860	---	---	2940	1980	3000	2700
18	9950	8510	6450	5880	4660	2500	7890	5550	3700	2050	3200	3000
19	10100	8230	8340	6000	5210	3770	6480	5250	3710	2540	4200	3150
20	10000	8120	10100	8310	5280	3930	5250	3870	4720	3340	4450	2600
21	10500	8320	9960	5700	5370	3630	5620	3820	6900	2700	3000	2400
22	9050	7880	7560	5880	5100	3750	6740	4850	4980	2280	3050	2600
23	9400	7570	7890	6630	4650	3450	5250	4110	2690	1070	2900	1750
24	10900	8530	8310	6660	5160	3960	4880	3200	6250	2630	2100	1500
25	10000	8360	9780	8190	5760	4620	4410	3330	6510	3270	2140	1620
26	9920	8480	10200	6300	6260	5000	4030	3220	4880	3110	2420	2030
27	9900	8040	7800	6690	6620	5210	8600	3350	4190	2510	2720	2180
28	9330	7710	8430	7290	5770	4330	5070	3840	4150	2920	3120	2510
29	9180	7920	8520	6150	5540	4160	5140	2170	3690	2730	3720	2770
30	9360	8040	6990	5250	4420	2710	5340	4380	---	---	3810	3150
31	9210	8190	---	---	2710	1490	5770	2140	---	---	3480	2940
MONTH	10900	5830	10400	5250	7880	1360	8600	1510	7020	1070	7000	1500

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3150	2970	3590	3050	3600	2820	2460	2220	7410	6750	6910	5680
2	3420	3060	4090	2380	4650	3510	3030	2220	7340	6500	6240	5760
3	3830	3120	3450	2460	4680	3360	3180	2760	6630	5860	6780	5730
4	4300	3550	3600	2940	4920	3630	3660	2310	6610	5950	6830	6230
5	4800	3800	3630	3090	5250	4860	2590	2160	6210	5520	6730	6220
6	4030	3640	3750	3240	6080	5180	3280	2590	6380	6140	6850	6220
7	3810	2820	4440	3660	6980	6170	3100	2650	6700	6380	7630	6400
8	2950	2300	4970	3830	6660	5730	3870	3030	8190	6580	6890	6200
9	3530	2480	3950	2390	6690	6330	4060	3400	6870	6450	7530	6480
10	3950	3260	2420	1790	7160	6350	3510	2040	7170	6090	7220	6260
11	4140	3450	2390	1880	7200	6510	3760	2680	6770	6080	7380	6210
12	4320	3090	3140	2390	7160	6590	3020	2750	6380	5930	6580	6160
13	4050	1380	4100	3140	6960	6510	3030	2790	7300	6100	7560	5850
14	1380	1110	4390	3580	8800	6490	3700	2500	6890	5900	6180	1440
15	3140	820	4060	3340	6570	5010	3470	2270	7030	6250	1500	1230
16	2200	1090	3990	3540	9070	5290	2520	689	6940	5590	1740	1320
17	1270	1000	3710	3410	8650	5500	969	879	6600	3930	2520	1680
18	1440	930	4320	3600	6380	5300	1360	940	6660	2790	4590	2340
19	2100	1030	4700	3890	6590	5930	1720	1120	3800	2510	3690	1740
20	2250	690	5750	4640	6260	6050	2370	1720	5950	2380	2880	1920
21	755	725	5610	5100	7530	6140	2750	2360	4310	2810	3330	2730
22	1120	755	5700	4980	8000	6200	4220	2750	5230	4090	4320	2910
23	1130	1040	5750	5270	7030	6010	5190	3510	6760	4960	5610	3930
24	1860	1080	6400	5530	6360	4950	4230	3090	6040	5260	5790	3840
25	1860	1410	6600	5460	5280	4500	4600	3790	6010	5170	4170	3930
26	2210	1780	5820	5190	4880	4280	5170	3700	4980	2550	5370	1680
27	2890	2020	5910	5280	4930	4600	5860	4120	4200	2100	1680	1140
28	3420	2700	6180	5760	5190	4110	6000	5370	3330	2400	1800	1260
29	4530	3000	5970	5670	5100	4110	5970	5340	4140	3180	1620	1260
30	3930	3300	6690	3960	5850	1860	6270	5940	5560	4140	1650	690
31	---	---	10100	3570	---	---	6750	5790	6580	4510	---	---
MONTH	4800	690	10100	1790	9070	1860	6750	689	8190	2100	7630	690
YEAR	10900	689										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.9	6.5	7.8	7.4	7.2	6.9	7.5	7.3	7.5	7.1	7.9	7.5
2	7.1	6.4	7.5	7.2	7.2	6.7	7.3	7.3	7.7	7.3	7.6	7.5
3	7.3	7.1	8.0	7.5	7.3	6.6	7.4	7.2	7.4	7.3	---	---
4	7.2	7.0	8.1	6.9	8.2	7.0	7.3	7.0	8.0	7.1	---	---
5	7.2	6.9	8.1	7.1	8.1	7.7	7.6	7.1	7.7	6.8	---	---
6	7.1	6.6	8.2	6.7	8.0	7.3	7.5	7.0	8.0	7.7	---	---
7	7.3	6.5	7.6	7.2	7.8	7.0	7.3	7.0	7.7	7.4	7.9	7.6
8	7.3	6.9	7.4	7.1	7.1	6.8	7.9	6.9	7.8	7.4	8.3	7.6
9	7.4	6.8	7.3	7.1	7.0	6.6	7.6	7.4	7.8	7.4	8.0	7.6
10	7.6	7.3	7.8	7.2	7.1	6.5	7.6	7.3	7.5	7.3	8.7	7.4
11	7.7	7.2	7.6	7.2	7.4	7.1	7.5	7.2	7.6	7.0	8.5	7.2
12	7.4	7.2	7.8	7.2	7.5	7.3	8.4	7.2	7.7	6.6	7.9	7.0
13	7.4	7.0	8.3	7.2	7.7	6.8	7.9	7.0	8.1	7.6	8.0	7.7
14	7.3	6.9	8.6	7.4	8.0	7.7	7.2	6.8	8.4	7.4	7.9	7.6
15	7.3	6.8	7.8	7.3	7.8	7.1	7.5	6.4	7.7	7.2	7.9	7.6
16	7.4	6.6	8.0	7.1	7.2	6.0	---	---	7.7	7.4	7.6	7.5
17	7.5	7.2	7.7	7.1	7.1	6.9	---	---	7.5	7.1	7.7	7.6
18	7.5	7.2	7.7	7.1	7.2	6.4	7.2	6.8	7.5	6.8	7.7	7.5
19	7.5	6.9	7.9	7.0	7.4	7.2	7.1	6.9	8.0	6.5	8.9	7.5
20	7.3	7.1	8.3	7.4	7.3	7.1	7.1	6.9	8.3	7.7	7.8	7.7
21	7.3	6.8	8.6	7.4	7.3	7.2	7.1	6.6	8.2	7.7	7.8	7.5
22	7.2	6.6	7.4	6.8	7.3	7.1	7.5	6.4	8.1	7.6	7.9	7.7
23	7.4	6.5	7.2	6.0	7.3	6.9	7.3	7.1	7.7	7.3	8.4	7.7
24	7.6	7.4	7.2	6.9	7.4	6.6	7.4	7.1	7.7	7.2	8.2	7.3
25	7.5	7.2	7.4	6.4	7.5	7.4	7.1	6.7	7.6	6.7	8.0	7.3
26	10.0	7.2	7.8	7.3	7.5	7.4	7.1	6.8	7.8	7.5	7.8	7.0
27	10.7	7.2	7.7	7.2	7.5	7.2	8.1	6.6	7.8	7.0	7.8	7.5
28	7.5	7.2	7.5	7.2	7.8	7.1	8.0	6.9	7.9	7.5	7.6	7.4
29	7.7	7.2	7.4	7.1	7.9	7.3	7.5	6.2	8.0	7.2	7.6	7.4
30	7.7	6.8	7.3	7.0	7.6	7.1	9.6	7.5	---	---	7.6	7.2
31	7.8	7.5	---	---	7.4	7.3	7.7	7.4	---	---	7.6	7.1
MONTH	10.7	6.4	8.6	6.0	8.2	6.0	9.6	6.2	8.4	6.5	8.9	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	6.9	7.5	7.3	7.5	7.1	7.5	6.7	7.5	7.3	7.4	7.2
2	7.7	6.8	7.5	7.1	7.3	6.9	7.6	7.0	7.6	6.8	7.2	7.0
3	7.7	7.3	7.5	7.1	7.4	7.1	7.2	6.9	7.5	7.0	7.5	6.8
4	7.5	7.3	7.4	7.2	7.4	6.9	6.9	6.6	7.4	6.7	7.5	7.3
5	8.2	7.2	7.5	7.2	7.4	7.3	6.8	6.5	7.8	6.9	7.4	6.8
6	7.6	7.0	7.4	7.2	7.3	7.2	6.9	6.8	7.5	6.6	7.4	7.0
7	7.8	7.2	7.5	6.8	7.5	7.0	7.1	6.8	7.5	7.0	7.3	7.0
8	7.8	7.2	7.5	7.3	7.4	7.1	7.2	6.8	7.2	6.9	7.4	7.1
9	7.9	7.2	7.5	7.2	7.5	7.1	7.1	6.9	7.4	6.9	7.3	6.9
10	7.9	7.7	7.9	7.5	7.4	7.1	6.9	6.7	7.5	7.1	7.3	6.7
11	8.2	7.5	7.7	7.4	7.4	7.0	7.0	6.8	7.4	6.9	7.4	7.2
12	7.8	7.0	7.6	7.4	7.2	6.6	7.0	6.8	7.4	7.0	7.3	7.0
13	7.7	7.2	7.5	7.0	7.4	6.7	7.0	6.9	7.4	6.8	7.2	6.7
14	7.7	7.3	7.5	6.9	7.5	7.3	7.0	6.8	7.4	7.1	6.9	6.4
15	8.6	7.1	7.6	7.3	7.4	7.1	7.0	6.8	7.5	6.8	7.0	6.8
16	8.6	7.5	7.6	7.3	7.4	7.0	6.8	6.6	7.3	7.0	6.8	6.7
17	8.0	7.4	7.5	7.1	7.4	6.8	6.8	6.7	7.3	7.2	6.7	6.5
18	7.6	7.4	7.5	7.3	7.4	7.1	7.3	6.7	7.3	7.0	6.8	6.6
19	7.5	7.3	7.4	7.3	7.4	6.6	7.1	7.0	7.1	7.0	6.9	6.6
20	7.9	7.2	7.5	7.2	7.5	7.2	7.1	6.9	7.2	6.8	6.8	6.7
21	7.7	7.5	7.7	7.3	7.5	7.3	7.2	6.9	7.2	6.9	6.8	6.6
22	7.5	7.4	7.8	7.4	7.4	6.9	7.3	7.1	7.3	6.7	7.0	6.7
23	7.5	7.4	7.8	7.4	7.5	7.2	7.3	6.8	7.2	7.1	6.9	6.4
24	7.4	7.3	7.6	7.1	7.5	7.1	7.2	7.0	7.3	6.9	7.0	6.8
25	7.7	7.3	7.8	7.3	7.4	7.3	7.3	7.1	7.3	7.0	6.9	6.7
26	7.7	7.4	7.5	6.7	7.3	7.1	7.6	6.8	7.2	7.0	6.9	6.6
27	8.1	7.1	7.5	6.9	7.2	6.7	7.3	7.0	7.2	7.0	6.8	6.7
28	9.0	7.4	7.5	6.6	7.2	7.1	7.4	7.2	7.2	7.1	6.8	6.6
29	7.5	7.3	7.5	6.9	7.2	6.7	7.4	7.2	7.2	7.1	6.7	6.6
30	7.6	6.9	7.2	6.9	7.3	6.9	7.5	7.0	7.2	7.0	7.0	6.6
31	---	---	7.5	7.2	---	---	7.5	7.4	7.3	6.8	---	---
MONTH	9.0	6.8	7.9	6.6	7.5	6.6	7.6	6.5	7.8	6.6	7.5	6.4
YEAR	10.7	6.0										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.7	0.2	0.7	0.4	5.1	3.8	7.9	4.6	8.4	7.6	10.0	9.4
2	0.9	0.2	0.5	0.4	5.4	4.3	8.1	7.9	7.7	7.1	9.4	8.8
3	2.7	0.3	0.5	0.5	5.1	4.7	8.2	7.9	7.4	6.0	---	---
4	1.6	0.2	2.0	0.5	4.7	4.2	8.1	7.7	10.4	8.5	---	---
5	1.7	0.2	1.9	0.7	5.2	4.4	8.4	6.1	10.1	9.4	---	---
6	1.9	0.2	2.1	0.8	4.4	3.4	8.5	8.1	10.0	9.0	---	---
7	1.1	0.2	3.3	1.0	4.8	2.2	8.4	8.1	9.3	9.0	10.9	10.9
8	1.9	0.2	3.3	1.3	5.0	4.4	8.2	7.8	9.0	8.8	11.3	10.8
9	0.6	0.2	2.9	2.1	4.9	4.1	8.1	7.5	8.9	8.5	11.8	11.3
10	0.9	0.2	2.4	1.2	4.1	3.1	8.1	7.6	8.8	8.2	11.6	10.9
11	1.5	0.2	1.6	1.0	3.5	3.0	7.9	7.6	8.4	7.4	11.5	10.3
12	1.2	0.2	1.4	1.0	3.8	3.3	8.4	7.1	8.0	7.3	10.8	9.7
13	1.4	0.2	1.2	1.0	3.8	3.0	8.3	7.8	8.8	7.3	9.9	9.3
14	0.4	0.2	3.6	1.1	3.3	2.7	9.2	8.2	9.8	8.1	9.8	9.2
15	0.5	0.2	2.8	1.3	5.8	3.0	10.2	9.0	10.5	9.7	9.9	9.4
16	0.6	0.1	2.3	1.2	5.5	4.8	---	---	10.0	9.4	10.0	9.2
17	0.9	0.2	2.5	1.3	5.6	4.8	---	---	9.9	9.4	9.8	9.1
18	2.0	0.1	2.2	1.3	6.8	5.6	9.5	8.0	9.4	8.3	9.7	8.8
19	0.7	0.1	1.5	1.3	7.3	6.0	8.9	7.9	9.5	8.3	9.8	8.7
20	0.9	0.1	1.7	1.4	6.8	6.7	8.1	7.6	9.1	8.3	9.8	9.3
21	0.4	0.2	4.8	1.4	6.7	5.1	7.9	7.2	8.7	8.1	9.4	8.7
22	0.3	0.1	5.9	3.4	5.5	5.0	7.4	6.7	10.2	8.6	9.0	8.6
23	0.3	0.1	5.7	4.6	5.8	5.0	7.1	6.6	10.3	7.5	10.3	9.0
24	0.3	0.1	5.6	3.8	6.1	3.8	7.3	6.3	9.9	9.3	10.5	10.3
25	0.2	0.1	5.1	3.8	4.8	3.8	9.2	6.1	9.5	9.0	10.5	10.2
26	0.5	0.1	4.3	3.1	4.2	3.2	9.4	8.9	10.0	8.8	10.4	9.9
27	0.8	0.1	3.4	2.3	4.3	2.1	9.7	9.3	10.0	9.6	9.9	8.9
28	0.3	0.2	4.3	2.7	2.7	1.3	9.8	8.9	9.7	9.5	8.9	8.2
29	0.3	0.2	4.0	2.4	3.2	1.5	9.3	6.0	9.8	9.2	8.9	8.3
30	0.6	0.3	4.2	2.9	4.0	2.4	9.4	6.1	---	---	9.0	8.2
31	0.6	0.3	---	---	4.7	2.9	9.2	6.2	---	---	9.2	8.4
MONTH	2.7	0.1	5.9	0.4	7.3	1.3	10.2	4.6	10.5	6.0	11.8	8.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.9	8.3	3.9	2.0	3.3	0.5	5.1	0.5	5.3	0.4	1.5	0.4
2	9.3	8.6	4.1	1.2	2.8	1.1	4.8	0.6	4.2	0.4	1.6	0.3
3	9.4	6.1	4.3	0.0	2.6	0.2	0.6	0.1	5.0	0.5	1.4	0.4
4	8.9	8.5	3.8	1.8	3.2	0.6	3.4	0.2	5.9	0.3	2.8	0.5
5	8.9	8.4	4.4	1.4	2.2	0.9	5.0	2.6	9.9	0.3	2.7	0.7
6	8.4	7.5	3.9	1.9	2.2	0.1	5.3	4.6	9.4	0.9	2.6	0.3
7	9.1	7.5	5.2	1.6	3.2	0.0	5.4	3.8	8.9	0.6	1.8	0.3
8	10.5	9.1	3.2	1.7	3.7	0.1	5.2	2.9	5.3	0.3	1.5	0.3
9	10.6	6.1	3.5	1.0	3.8	0.1	5.6	3.3	3.2	0.3	3.3	0.4
10	9.7	6.3	5.4	0.4	5.2	0.1	5.3	3.6	4.1	0.3	4.7	1.0
11	8.3	7.1	5.8	2.1	6.6	1.0	3.6	2.5	4.1	0.3	3.1	0.6
12	7.7	4.7	5.7	2.3	5.8	0.8	3.0	1.6	4.6	0.3	1.9	0.4
13	6.6	4.3	4.0	2.0	1.9	0.1	2.3	1.0	6.8	0.3	4.2	0.4
14	6.8	5.8	4.9	1.3	2.2	0.1	2.7	0.5	8.0	0.4	2.2	0.4
15	7.2	6.5	4.1	2.0	2.1	0.1	2.2	0.2	6.5	0.3	3.5	2.2
16	7.3	6.9	3.7	1.8	4.1	0.3	4.7	1.7	7.2	0.3	4.1	3.4
17	7.8	7.1	3.4	0.9	3.3	0.1	4.0	3.5	1.0	0.3	4.3	3.5
18	7.1	5.4	3.2	0.5	4.5	0.9	3.7	3.2	1.2	0.3	4.0	2.9
19	5.9	4.3	3.2	0.8	2.9	0.4	3.5	2.5	1.2	0.3	3.4	2.6
20	6.0	4.5	4.3	1.0	0.9	0.2	3.1	2.0	1.3	0.6	3.6	1.6
21	5.8	5.2	5.5	1.7	0.2	0.2	2.9	1.8	1.9	0.3	2.9	1.7
22	7.5	5.1	6.9	3.0	1.6	0.4	3.1	0.2	1.8	0.3	2.5	0.6
23	6.2	5.6	9.2	1.5	5.8	1.3	2.9	1.2	0.6	0.3	2.3	1.9
24	6.0	4.8	8.9	1.5	5.6	1.3	2.2	1.0	0.8	0.2	2.7	1.7
25	6.9	4.9	6.5	1.3	7.1	3.2	2.0	0.7	0.7	0.3	2.3	0.8
26	7.5	4.3	7.1	0.6	6.4	4.2	2.7	1.0	1.3	0.3	1.6	0.7
27	6.0	4.6	6.8	0.0	4.1	1.8	2.0	0.3	1.1	0.8	3.6	1.6
28	5.9	2.7	7.2	1.0	5.8	0.2	2.4	1.0	1.2	0.5	4.4	3.6
29	5.9	3.3	8.0	1.2	3.5	0.1	2.1	0.3	0.8	0.3	4.4	4.1
30	5.6	1.1	3.5	0.5	3.7	0.3	4.2	1.0	1.4	0.2	5.9	4.3
31	---	---	1.7	0.3	---	---	3.8	1.1	1.6	0.3	---	---
MONTH	10.6	1.1	9.2	0.0	7.1	0.0	5.6	0.1	9.9	0.2	5.9	0.3
YEAR	11.8	0.0										

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	20.0	17.5	15.5	7.0	5.5	5.5	5.0	5.0	3.0	8.0	5.5
2	23.0	20.0	19.0	17.5	7.5	5.0	5.5	5.0	6.5	4.5	8.0	4.5
3	23.5	22.5	17.5	14.0	6.5	5.0	6.0	4.5	9.0	6.0	---	---
4	22.5	20.5	14.0	11.0	7.0	5.5	6.0	5.0	6.0	2.0	---	---
5	21.5	19.0	12.5	10.0	7.5	5.5	5.5	4.5	2.5	0.5	---	---
6	20.5	18.5	11.5	9.5	9.5	7.5	4.5	3.0	3.0	1.5	---	---
7	18.5	16.0	9.5	7.0	9.5	9.0	4.5	2.0	4.0	2.0	7.0	6.0
8	17.5	14.0	9.0	5.5	9.5	9.0	5.5	3.5	4.0	1.5	6.5	4.5
9	16.5	14.5	8.0	6.5	10.5	9.0	6.0	4.5	4.0	2.0	4.5	3.5
10	15.0	14.0	9.0	7.0	13.0	10.5	7.0	5.0	4.5	1.5	10.5	3.0
11	15.5	13.0	10.5	7.5	12.5	9.5	7.0	6.0	6.0	2.5	11.5	10.5
12	16.0	13.0	11.5	9.0	9.5	8.0	6.5	5.5	6.5	4.5	11.5	7.5
13	16.5	13.0	11.5	9.5	8.5	7.5	7.0	5.5	6.0	5.0	8.5	7.0
14	16.0	15.0	12.0	9.0	8.0	7.0	6.5	3.5	5.0	4.0	8.5	6.0
15	18.0	14.5	14.5	11.5	10.0	7.5	3.5	0.5	4.5	3.0	6.0	5.5
16	19.0	16.0	14.0	12.0	10.0	9.5	---	---	3.5	3.0	6.5	5.5
17	19.0	16.0	13.5	11.0	9.5	6.5	---	---	4.5	2.5	7.0	6.5
18	19.0	16.5	14.5	11.0	6.5	5.0	3.5	2.5	4.5	4.0	6.5	6.0
19	18.5	15.5	14.0	11.0	5.0	3.5	6.5	3.5	4.0	2.5	6.5	5.0
20	19.0	15.5	11.0	9.5	7.0	5.0	6.5	5.0	3.0	1.5	7.0	6.0
21	19.5	16.0	9.5	7.0	7.5	7.0	6.5	5.5	5.0	2.5	9.5	7.0
22	18.5	17.0	7.5	5.5	7.5	5.5	8.0	6.0	5.0	2.5	9.0	8.0
23	18.5	18.0	6.5	5.0	6.5	4.5	8.0	6.5	4.5	2.5	8.0	5.0
24	18.0	17.0	6.0	5.5	7.5	6.5	8.5	6.5	5.0	4.0	5.0	4.0
25	17.5	16.5	7.5	6.0	7.5	6.5	8.0	4.0	7.0	5.0	5.5	4.0
26	18.0	16.5	8.0	6.5	9.5	7.5	5.0	3.0	6.0	4.5	7.0	4.5
27	18.5	15.5	7.5	7.0	12.0	9.5	4.0	2.0	6.5	3.5	10.5	6.5
28	18.5	15.5	8.0	7.0	11.5	8.0	4.0	3.0	6.5	4.5	10.5	8.0
29	18.0	15.0	8.5	7.0	8.0	7.0	4.0	1.5	7.0	5.5	9.5	8.5
30	18.0	14.5	8.0	7.0	12.5	7.5	3.5	1.5	---	---	9.5	7.5
31	18.5	15.0	---	---	7.5	5.5	3.5	1.0	---	---	9.5	7.0
MONTH	23.5	13.0	19.0	5.0	13.0	3.5	8.5	0.5	9.0	0.5	11.5	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	19.5	17.0	19.5	17.0	26.0	21.0	25.5	22.5	24.5	21.5
2	8.5	7.0	20.5	18.5	21.5	18.0	26.5	21.5	25.0	23.5	24.5	22.0
3	10.0	7.0	20.5	17.0	23.5	20.5	---	---	25.0	23.0	23.0	21.5
4	10.5	9.0	18.5	16.5	25.0	21.0	---	---	25.0	22.5	23.0	20.5
5	12.0	8.5	19.0	15.0	22.0	20.0	---	---	25.0	20.5	22.0	18.5
6	14.5	10.5	20.0	16.0	23.0	21.5	20.5	20.0	23.0	20.5	23.0	18.5
7	12.0	8.0	20.5	18.0	24.0	19.5	22.0	19.0	25.0	21.0	23.0	19.0
8	8.0	6.0	19.0	17.0	24.5	20.0	22.0	19.5	23.0	21.0	22.0	20.5
9	9.5	5.5	18.5	15.5	24.5	21.0	23.5	20.0	21.5	19.5	22.5	19.5
10	12.0	8.0	23.5	14.5	22.0	19.0	23.5	20.0	22.0	18.5	22.5	18.5
11	15.5	11.5	18.5	14.0	21.5	17.0	25.5	22.5	23.0	18.5	21.5	19.5
12	17.5	13.5	20.0	16.0	21.5	18.0	27.0	24.0	22.5	20.5	22.5	20.5
13	18.5	15.0	19.0	17.5	22.0	19.5	27.0	24.5	25.0	21.0	23.5	22.0
14	16.5	15.0	19.5	17.5	24.5	21.0	26.0	24.0	26.0	21.5	22.5	20.0
15	16.0	15.0	20.0	18.0	25.0	23.0	24.5	23.5	25.5	23.0	20.0	19.0
16	16.0	14.0	19.5	18.5	25.0	22.5	23.5	21.5	25.0	21.0	19.5	18.5
17	15.0	13.5	20.0	18.0	23.5	21.5	23.5	22.5	23.5	22.5	21.5	18.5
18	16.5	14.0	21.5	17.5	25.0	20.5	25.5	23.5	25.5	23.0	22.0	21.5
19	17.0	16.0	22.5	19.0	26.5	22.0	26.5	24.5	25.5	23.0	22.0	20.5
20	16.5	13.5	23.5	20.5	24.5	23.0	27.5	25.0	25.5	23.5	21.0	19.0
21	13.5	13.0	24.5	21.0	23.0	20.5	29.0	26.0	26.0	22.5	21.0	18.0
22	13.0	12.0	24.0	21.0	20.5	17.0	28.5	25.0	25.0	22.5	21.0	16.0
23	14.5	12.5	25.0	21.0	17.0	16.0	29.5	26.0	23.5	23.0	18.0	16.5
24	14.5	13.5	25.5	20.0	17.0	16.5	27.5	25.5	25.5	22.5	18.0	16.5
25	14.5	12.5	24.5	21.5	19.0	17.0	26.5	24.0	26.0	23.5	20.0	18.0
26	15.0	12.5	23.5	20.5	20.0	18.0	25.0	23.0	25.0	23.0	20.5	19.5
27	16.0	12.5	23.5	19.0	23.0	19.0	23.5	22.0	24.5	23.0	20.0	17.5
28	21.0	13.5	23.5	19.0	23.0	21.0	24.0	21.5	24.5	22.0	17.5	16.5
29	17.5	15.0	24.0	19.5	23.0	22.0	24.0	21.0	25.5	21.5	17.5	16.5
30	20.0	15.0	22.0	20.5	22.0	21.0	25.0	21.5	24.5	21.5	17.0	13.5
31	---	---	20.5	18.5	---	---	25.5	22.0	24.5	21.5	---	---
MONTH	21.0	5.5	25.5	14.0	26.5	16.0	29.5	19.0	26.0	18.5	24.5	13.5
YEAR	29.5	0.5										

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03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OHIO

LOCATION.--Lat 40°15'41", long 81°36'33", in T.3 N., R.3 W., Tuscarawas County, at gaging station on right bank 150 ft upstream from highway bridge, 0.2 mile south of Newcomerstown, 2 miles upstream from Buckhorn Creek, and 4 miles downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1946-48, 1955-57, 1960-72 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.										
27...	1045	--	--	--	--	--	--	--	--	--
NOV.										
17...	1120	751	--	--	--	--	--	--	--	--
JAN.										
14...	1450	2180	--	--	180	200	--	2.6	11	--
MAR.										
16...	1445	8660	--	--	110	190	--	3.2	14	--
APR.										
26...	1400	7300	--	--	--	--	--	--	--	--
MAY										
18...	1455	2330	--	--	--	--	--	--	--	--
JUNE										
07...	1015	--	--	--	--	--	--	--	--	--
JULY										
12...	1120	2450	--	--	160	180	--	1.8	7.8	--
SEP.										
12...	1100	500	136	0	210	700	.8	1.4	6.2	.21

DATE	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
27...	--	--	--	--	--	--	--	<.5	6.0
NOV.									
17...	--	--	--	--	2580	--	9.0	--	--
JAN.									
14...	--	--	390	--	1160	7.3	3.0	--	--
MAR.									
16...	--	--	310	--	941	7.6	6.0	--	--
APR.									
26...	--	--	--	--	733	--	13.0	--	--
MAY									
18...	--	--	--	--	1350	--	18.5	--	--
JUNE									
07...	--	--	--	--	--	--	--	1.7	29
JULY									
12...	--	--	340	--	988	7.5	23.0	--	--
SEP.									
12...	.65	1660	750	640	2610	8.2	20.5	--	--

03131500 BLACK FORK AT LOUDONVILLE, OHIO

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec.1, T.19 N., R.16 W., Ashland County, at gaging station on right bank on upstream side of bridge at Loudonville, 1.5 miles downstream from Big Run. Continuous water-quality recorder located at Loudonville water treatment plant, just downstream from the gaging station.

DRAINAGE AREA.--349 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, April 1968 to September 1972.
Water temperatures: April 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,030 micromhos Feb. 3; minimum, 84 micromhos Aug. 18.
pH: Maximum, 8.9 Dec 2; minimum, 6.1 June 26, Aug. 7.
Dissolved oxygen: Maximum, 14.7 mg/l Apr. 12; minimum, 1.7 mg/l Oct. 7.
Water temperatures: Maximum, 25.5°C July 21, 22; minimum, 0.5°C Jan. 27, 29, Feb. 4, 5, 8.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)
OCT.								
01...	1600	92	202	0	64	36	.4	1.6
22...	1500	88	216	0	67	37	.4	1.9
27...	1630	--	--	--	--	--	--	--
NOV.								
08...	1800	--	--	--	--	--	--	--
23...	0800	92	202	6	70	29	.2	1.6
30...	0925	179	200	0	70	55	.3	4.0
DEC.								
07...	1300	320	172	0	68	50	.3	2.1
20...	1353	214	212	8	87	43	.2	2.2
JAN.								
04...	0800	282	164	0	81	43	.2	3.1
20...	1100	270	174	0	93	52	.2	3.6
FEB.								
20...	1100	142	190	0	74	88	.2	2.9
24...	1600	169	162	6	75	51	.2	3.4
MAR.								
01...	0700	342	154	0	69	57	.3	4.0
17...	1400	1260	101	0	60	30	.3	5.2
APR.								
11...	1507	462	162	0	81	34	.2	3.3
26...	1410	1370	102	0	51	16	.2	2.7
MAY								
08...	0800	450	160	0	61	20	.2	1.9
21...	0900	475	170	0	71	22	.2	2.0
JUNE								
02...	0800	216	184	0	62	34	.2	2.1
05...	1130	--	--	--	--	--	--	--
19...	1133	354	152	4	67	23	.2	2.3
JULY								
13...	1100	345	169	4	64	44	.4	2.4
17...	0950	568	138	0	38	28	.4	2.5
AUG.								
11...	0800	129	206	8	63	53	.5	2.2
19...	0700	540	156	0	61	40	.5	1.7
SEP.								
12...	0600	134	215	0	60	48	.5	1.9
18...	1300	583	157	0	55	35	.5	1.5

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-72): Maximum, 1,030 micromhos Feb. 3, 1972; minimum, 84 micromhos Aug. 18, 1972.
pH (1971-72): Maximum, 8.9 Dec. 2, 1971; minimum, 6.1 June 26, Aug. 7, 1972.
Dissolved oxygen (1971-72): Maximum, 14.7 mg/l Apr. 12, 1972; minimum, 1.7 mg/l Oct. 7, 1972.
Water temperatures (1971-72): Maximum, 25.5°C July 21, 22, 1972; minimum, 0.5°C Jan. 27, 29, Feb 4, 5, 8, 1972.

REMARKS.--Continuous water-quality recorder operated since April 1968. Maximum recorded pH of 10.9 occurred Mar. 15, 1971; minimum recorded pH of 4.7 occurred June 30, July 1, 1971. Minimum recorded dissolved oxygen concentration of 0.0 mg/l occurred July 30, 1970. Maximum recorded water temperature value of 28.0°C occurred July 12, 1969. Minimum recorded water temperature value of freezing point occurred Feb. 12-14, 17, 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
01...	7.3	360	220	54	554	--	--
22...	8.5	372	240	63	591	--	--
27...	--	--	--	--	--	6.9	3.0
NOV.							
08...	--	--	--	--	--	<.5	--
23...	7.1	332	240	64	551	--	--
30...	18	388	230	66	656	--	--
DEC.							
07...	9.4	332	210	69	562	--	--
20...	9.5	402	240	53	645	--	--
JAN.							
04...	14	374	230	96	571	--	--
20...	16	432	260	120	661	--	--
FEB.							
20...	13	456	250	94	733	--	--
24...	15	392	250	110	601	--	--
MAR.							
01...	18	366	220	94	575	--	--
17...	23	282	170	87	407	--	--
APR.							
11...	15	324	230	97	528	--	--
26...	12	198	140	56	324	--	--
MAY							
08...	8.6	280	200	69	436	--	--
21...	8.8	288	220	80	474	--	--
JUNE							
02...	9.4	302	220	69	502	--	--
05...	--	--	--	--	--	<.5	7.0
19...	10	280	210	79	462	--	--
JULY							
13...	11	290	210	65	478	--	--
17...	11	220	160	47	341	--	--
AUG.							
11...	9.7	318	250	68	557	--	--
19...	7.7	274	200	72	434	--	--
SEP.							
12...	8.4	322	240	64	542	--	--
18...	6.6	258	190	62	412	--	--

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	630	558	606	585	708	558	---	---	660	654	645	534
2	597	561	597	570	570	549	---	---	684	651	684	489
3	621	582	657	591	570	546	---	---	1030	666	546	465
4	657	600	621	576	570	552	---	---	876	675	741	516
5	588	582	609	597	564	549	---	---	723	702	525	477
6	594	567	606	582	618	540	---	---	768	702	525	429
7	594	582	612	570	633	534	---	---	804	699	540	525
8	600	585	612	567	591	270	---	---	912	804	672	531
9	603	567	585	573	414	237	---	---	---	---	579	531
10	708	492	612	582	417	321	---	---	---	---	582	552
11	522	495	618	600	468	363	630	504	---	---	840	582
12	555	516	621	591	---	---	657	558	---	---	648	585
13	582	549	633	600	---	---	690	591	---	---	597	519
14	588	570	618	588	615	537	690	603	---	---	519	495
15	615	588	606	600	798	471	---	---	---	---	525	486
16	588	555	603	579	---	---	---	---	663	591	486	411
17	603	588	600	579	---	---	---	---	660	591	429	369
18	597	576	615	582	---	---	---	---	708	600	408	393
19	579	564	621	588	---	---	---	---	813	585	435	402
20	585	561	687	573	---	---	693	657	780	678	414	405
21	600	579	660	552	---	---	675	660	732	657	426	411
22	597	585	627	543	---	---	669	645	897	699	474	390
23	609	591	591	543	---	---	708	642	708	600	450	408
24	609	588	702	582	---	---	663	654	657	600	468	447
25	597	585	693	621	---	---	663	648	792	657	507	456
26	585	567	636	594	---	---	648	624	678	642	459	438
27	606	573	732	597	---	---	648	633	777	636	441	411
28	621	600	696	585	---	---	678	636	777	651	468	423
29	621	606	759	630	---	---	672	648	705	609	486	462
30	612	600	846	618	---	---	711	621	---	---	555	483
31	618	591	---	---	---	---	---	---	---	---	510	498
MONTH	708	492	846	543	---	---	---	---	---	---	840	369

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	504	498	355	337	535	469	496	430	519	483	501	468
2	507	492	367	355	508	481	502	475	531	501	504	492
3	531	498	379	364	508	433	502	270	528	513	498	492
4	546	522	400	379	---	---	444	348	534	525	537	462
5	549	525	421	397	478	466	459	444	543	528	498	465
6	549	510	430	418	487	469	471	435	543	525	504	489
7	531	420	439	427	514	487	441	375	537	522	519	504
8	496	438	460	421	520	385	375	231	540	525	528	510
9	618	492	505	340	526	376	231	177	531	522	528	519
10	522	474	421	376	541	502	192	150	---	---	528	519
11	532	474	442	421	517	499	240	162	---	---	534	525
12	589	502	448	433	526	508	495	204	---	---	537	525
13	550	394	433	427	511	196	546	444	---	---	552	501
14	472	415	463	406	---	---	465	387	---	---	588	348
15	505	472	433	406	469	442	468	348	540	534	420	375
16	499	427	439	403	475	424	414	129	558	531	429	420
17	427	397	460	433	---	---	387	198	546	153	435	417
18	439	427	457	445	---	---	441	222	399	84	420	393
19	445	427	457	430	469	454	402	246	444	399	417	375
20	430	226	445	379	487	466	324	228	444	357	390	381
21	385	274	475	376	505	484	300	252	432	321	---	---
22	361	307	466	451	505	493	471	262	435	216	417	411
23	370	343	475	457	508	496	---	---	345	228	435	417
24	358	325	490	448	526	505	---	---	423	192	522	414
25	331	325	496	460	505	439	---	---	441	417	459	429
26	328	319	505	454	520	439	---	---	492	366	498	378
27	331	325	505	439	499	481	504	486	492	417	435	354
28	334	322	466	331	508	478	513	420	447	417	420	387
29	337	325	460	256	484	367	486	390	468	447	450	402
30	346	334	454	166	505	427	477	378	483	465	402	246
31	---	---	586	451	---	---	501	381	489	453	---	---
MONTH	618	226	586	166	541	196	546	129	558	84	588	246
YEAR	1030	84										

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.0	8.0	7.5	8.4	7.6	6.9	6.6	8.3	8.2	7.2	7.0
2	7.5	6.7	7.7	7.3	8.9	8.4	7.1	6.5	8.3	7.9	7.5	6.7
3	7.5	7.2	7.5	7.2	8.8	8.5	7.0	6.6	7.9	7.6	7.8	7.5
4	7.5	7.4	7.7	7.3	8.6	8.2	7.1	6.7	8.6	7.8	7.8	7.7
5	7.5	7.3	7.7	7.4	8.2	8.1	7.3	7.0	8.7	8.1	7.8	7.6
6	7.4	7.2	7.4	7.2	8.1	7.5	7.5	7.3	8.6	8.2	8.0	7.8
7	7.5	7.3	7.6	7.1	7.5	6.7	7.5	6.9	8.5	8.2	8.0	7.3
8	7.6	7.4	8.2	7.3	7.5	6.8	7.1	6.7	8.6	8.5	7.8	7.4
9	7.5	7.4	---	---	7.5	7.4	7.1	6.5	---	---	7.9	7.8
10	7.4	7.2	---	---	7.4	7.1	7.1	6.8	---	---	8.0	7.6
11	7.6	7.4	---	---	7.1	6.9	7.5	7.0	---	---	7.8	7.5
12	7.7	7.6	---	---	7.5	7.1	7.6	7.3	---	---	7.5	7.3
13	7.7	7.5	---	---	7.5	7.2	7.6	7.3	---	---	7.3	7.2
14	7.5	7.4	---	---	7.8	7.4	7.9	7.4	---	---	---	---
15	7.5	7.4	---	---	7.5	6.8	---	---	7.8	7.7	---	---
16	7.5	7.4	---	---	7.0	6.8	---	---	7.9	7.6	---	---
17	7.6	7.4	---	---	7.4	6.9	---	---	7.9	7.6	---	---
18	7.8	7.4	---	---	7.8	7.3	---	---	7.7	7.4	---	---
19	7.8	7.5	---	---	7.9	7.6	---	---	7.9	7.6	---	---
20	7.6	7.5	---	---	8.6	7.8	7.7	7.5	8.3	7.9	7.5	7.3
21	7.6	7.3	---	---	7.8	7.7	7.7	7.5	8.2	7.6	7.5	7.5
22	7.5	---	---	---	8.2	7.8	7.7	7.4	7.8	7.5	7.5	7.3
23	---	---	---	---	8.3	8.1	7.6	7.4	8.2	7.8	7.7	7.5
24	---	---	---	---	8.1	7.4	7.7	7.5	8.0	7.6	7.8	7.7
25	7.3	6.9	---	---	7.7	7.4	8.0	7.4	7.7	7.4	7.8	7.7
26	7.6	7.1	---	---	7.4	7.2	8.4	8.0	7.7	7.5	7.9	7.7
27	7.7	7.4	---	---	7.2	6.9	8.7	8.0	7.9	7.6	7.8	7.6
28	7.7	7.5	---	---	7.1	6.8	8.7	8.3	7.6	7.3	7.7	7.6
29	7.8	7.5	---	---	7.4	7.1	8.8	7.7	7.4	7.1	7.6	7.6
30	7.9	7.6	7.6	7.3	7.4	6.4	8.6	8.4	---	---	7.7	7.6
31	7.9	7.6	---	---	6.8	6.4	---	---	---	---	7.7	7.6
MONTH	7.9	6.7	---	---	8.9	6.4	8.8	6.5	8.7	7.1	8.0	6.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.7	7.1	6.5	7.1	7.0	8.0	7.3	7.7	7.3	7.6	7.3
2	7.8	7.7	7.1	6.2	7.2	7.0	8.0	7.8	7.6	7.2	7.5	7.2
3	7.8	7.7	7.2	7.1	7.2	7.0	7.8	7.1	7.4	6.7	7.5	7.3
4	7.7	7.6	7.2	7.2	7.1	6.8	7.6	7.4	7.5	7.4	7.6	7.4
5	7.8	7.6	7.3	7.2	7.6	6.9	7.7	7.6	7.7	7.5	7.7	7.4
6	7.8	7.7	7.3	7.2	7.5	7.2	7.8	7.4	7.7	6.5	7.7	7.5
7	7.9	7.4	7.4	7.2	7.4	7.1	7.7	7.6	7.8	6.1	7.7	7.4
8	8.2	7.9	7.4	6.9	7.5	7.2	7.6	7.4	7.7	7.2	7.5	6.7
9	8.3	8.1	7.3	7.0	7.5	7.2	7.6	7.3	7.5	7.3	7.7	7.2
10	8.3	8.1	7.5	7.3	7.4	7.2	7.5	7.1	---	---	7.7	7.5
11	8.4	8.1	7.6	7.4	7.4	7.3	7.5	7.0	---	---	7.7	6.8
12	8.3	8.1	7.8	7.5	7.4	7.3	7.5	7.2	---	---	6.8	6.6
13	8.1	7.1	7.7	7.3	7.3	6.8	7.4	7.2	---	---	7.1	6.5
14	7.9	7.3	7.4	7.0	7.7	7.0	7.4	7.0	---	---	7.2	6.7
15	8.0	7.7	7.4	7.1	7.3	7.0	7.3	6.9	8.0	7.8	7.6	7.2
16	7.9	7.2	7.5	7.2	7.2	7.0	6.9	6.6	8.1	7.6	7.6	7.2
17	7.3	6.9	7.6	7.2	7.3	7.2	7.0	6.7	7.8	6.4	7.5	7.1
18	7.3	7.2	7.8	7.4	7.4	7.2	7.3	6.6	6.9	6.2	7.5	7.0
19	7.2	7.0	8.0	7.6	7.9	7.3	7.2	6.8	7.3	6.5	7.6	7.2
20	7.2	7.0	7.9	7.5	7.8	7.5	7.4	6.9	7.6	7.3	7.6	7.6
21	7.2	7.0	8.0	7.6	7.7	7.3	7.5	7.1	7.5	7.3	8.0	7.5
22	7.2	7.1	8.0	7.5	7.8	7.7	7.5	7.1	7.4	6.7	8.2	7.5
23	7.2	7.1	7.9	7.5	7.8	7.8	---	---	6.8	6.3	7.6	7.0
24	7.2	7.2	7.8	7.3	7.8	7.8	---	---	7.3	6.5	7.1	6.2
25	7.2	7.2	7.7	7.4	7.8	7.7	---	---	7.3	7.0	6.6	6.2
26	7.3	7.1	7.5	7.2	7.8	6.1	---	---	7.1	6.7	6.6	6.4
27	7.2	7.1	7.3	7.1	7.7	7.0	7.5	7.4	7.3	7.1	7.4	6.5
28	7.2	7.1	7.3	7.0	7.8	7.7	7.6	7.4	7.5	7.2	7.3	6.7
29	7.2	7.1	7.2	7.0	7.7	7.4	7.6	7.5	7.6	7.3	7.1	6.4
30	7.2	7.1	7.1	7.0	7.5	7.2	7.6	7.4	7.8	7.5	7.5	7.1
31	---	---	7.0	6.8	---	---	7.6	7.4	7.7	7.5	---	---
MONTH	8.4	6.9	8.0	6.2	7.9	6.1	8.0	6.6	8.1	6.1	8.2	6.2
YEAR	8.9	6.1										

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.4	3.1	7.0	4.5	8.0	6.1	9.4	7.9	10.6	9.0	12.3	11.8
2	5.3	3.8	6.1	4.1	8.7	8.0	10.0	8.9	10.6	9.7	11.9	9.8
3	5.4	3.5	4.9	3.4	9.4	8.0	9.9	9.0	12.3	9.7	12.1	11.3
4	5.0	3.6	5.9	3.8	9.2	8.3	10.1	6.5	13.1	11.2	12.1	11.6
5	5.4	2.9	8.2	4.5	8.5	7.9	7.9	6.8	13.3	9.6	11.7	11.5
6	3.7	1.9	7.0	5.5	8.0	6.2	8.1	7.8	13.4	11.2	12.5	11.7
7	3.9	1.7	8.1	5.3	8.6	3.8	10.4	7.4	13.1	12.6	12.3	11.5
8	4.5	2.1	8.8	6.7	8.7	5.3	12.2	9.3	13.2	12.8	11.7	11.1
9	3.2	1.9	8.4	7.2	8.9	8.4	12.1	7.2	---	---	12.1	11.7
10	3.5	1.9	8.6	6.6	8.4	6.5	10.8	7.0	---	---	12.0	11.6
11	4.1	2.2	8.7	6.6	6.6	5.9	10.7	7.6	---	---	11.8	11.1
12	5.1	3.0	8.4	6.0	7.9	6.3	10.1	9.5	---	---	11.2	10.6
13	4.9	3.0	8.1	5.2	10.0	7.5	10.3	9.4	---	---	10.7	10.2
14	4.7	2.9	8.3	5.6	10.0	4.0	10.9	9.8	---	---	11.4	9.8
15	5.4	3.4	7.7	4.7	8.4	5.3	---	---	12.3	11.9	13.4	10.7
16	6.6	4.1	7.7	4.4	7.9	4.5	---	---	12.2	11.9	12.1	8.3
17	6.5	5.1	7.6	4.7	9.7	7.9	---	---	12.1	11.7	12.8	10.2
18	7.5	4.3	7.6	4.7	10.8	9.7	---	---	11.8	11.4	13.0	9.3
19	7.0	5.1	5.0	3.8	11.6	10.7	---	---	11.7	11.5	13.1	10.1
20	6.2	4.8	5.2	3.7	11.4	10.6	9.1	7.3	12.5	11.6	12.0	10.1
21	6.1	4.1	6.2	4.3	11.2	10.3	9.3	7.2	12.5	12.1	13.6	11.0
22	5.7	4.2	7.6	5.3	11.6	10.1	9.6	7.6	12.4	11.9	12.4	10.0
23	4.5	3.5	8.9	6.5	11.6	10.1	9.7	7.3	12.5	12.2	13.5	12.0
24	3.9	3.3	7.9	6.3	11.2	10.4	9.5	7.5	12.3	11.9	13.7	13.2
25	4.0	3.3	8.1	6.1	11.8	9.9	10.1	8.1	12.2	11.7	13.7	12.9
26	6.1	3.4	7.5	5.9	11.3	8.9	10.8	8.5	12.6	12.2	13.2	12.1
27	6.3	4.5	6.5	5.6	9.6	4.1	13.6	10.1	12.8	12.5	12.5	11.0
28	6.4	4.2	6.6	5.5	5.1	4.5	11.0	10.4	12.6	11.8	11.3	9.8
29	6.7	4.4	6.3	5.4	6.3	5.2	14.5	10.3	12.0	11.5	9.9	9.4
30	7.3	4.9	6.1	5.0	7.9	4.7	13.6	11.1	---	---	9.7	9.4
31	7.0	4.6	---	---	8.1	7.0	---	---	---	---	9.9	9.6
MONTH	7.5	1.7	8.9	3.4	11.8	3.8	14.5	6.5	13.4	9.0	13.7	8.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.9	9.1	8.8	8.3	6.8	5.7	7.0	5.5	8.3	6.7	7.5	6.0
2	10.1	9.4	8.6	8.2	6.8	5.5	7.0	5.6	7.8	6.4	7.5	5.9
3	10.3	9.8	8.6	8.2	6.7	5.0	6.8	5.5	7.1	3.9	6.9	5.8
4	10.4	9.7	8.8	8.2	5.7	4.2	7.2	6.7	6.7	6.0	7.2	5.9
5	10.6	10.3	8.9	8.5	6.4	5.0	7.6	6.6	8.5	6.3	7.7	5.7
6	10.8	10.1	8.7	8.3	---	---	7.8	6.7	8.0	6.3	7.6	6.7
7	10.9	9.6	8.6	8.0	---	---	7.2	6.3	8.6	6.0	7.4	6.4
8	11.3	10.8	8.2	7.6	---	---	6.5	5.1	7.5	5.8	6.6	5.8
9	12.1	11.1	8.7	7.0	---	---	6.7	5.1	6.2	5.9	6.0	5.5
10	12.4	11.3	9.4	8.6	---	---	6.0	4.5	---	---	6.2	5.8
11	13.3	11.9	10.0	8.6	---	---	6.2	4.8	---	---	6.1	5.2
12	14.7	11.9	9.7	8.2	---	---	6.7	4.8	---	---	6.0	5.1
13	12.5	9.0	9.3	8.2	---	---	6.3	5.0	---	---	5.8	4.4
14	12.3	9.5	8.3	7.5	---	---	6.2	4.5	---	---	5.1	4.3
15	12.6	11.3	8.2	7.5	---	---	5.9	5.2	8.3	7.4	6.2	5.1
16	11.9	10.4	9.0	7.4	---	---	6.9	5.7	9.1	6.1	6.2	5.7
17	11.7	10.5	9.3	7.9	---	---	7.1	6.6	7.2	3.6	6.7	5.7
18	11.3	10.8	9.4	7.8	---	---	6.8	6.3	6.4	5.1	7.0	6.4
19	10.8	10.4	9.6	7.4	7.0	5.5	6.7	6.0	6.9	6.1	7.2	6.6
20	10.4	8.8	9.0	7.3	5.5	4.7	6.9	6.1	7.3	6.2	7.3	6.8
21	10.3	9.5	9.6	6.9	5.3	4.6	6.8	5.9	6.4	5.9	8.4	6.2
22	10.6	10.0	8.8	7.2	5.8	5.2	6.9	5.7	5.9	3.4	8.7	7.5
23	10.3	9.9	7.9	6.6	6.1	5.7	---	---	6.4	4.8	7.9	7.3
24	10.1	9.2	7.7	6.3	6.2	5.9	---	---	6.7	5.9	7.5	6.8
25	10.3	9.4	7.6	6.3	6.5	5.6	---	---	6.8	6.1	7.6	7.2
26	10.1	8.9	7.3	6.1	6.4	5.6	---	---	6.4	5.1	7.2	5.1
27	9.4	8.9	6.9	5.8	6.5	5.8	6.5	5.8	6.8	5.4	7.8	5.9
28	9.1	8.7	6.8	5.8	6.3	5.6	6.8	5.5	6.8	5.7	8.2	7.4
29	9.0	8.7	6.4	5.6	5.9	5.0	7.0	6.1	7.6	4.9	8.1	7.3
30	9.0	8.6	5.8	5.2	5.6	4.3	6.9	6.0	8.2	6.3	8.5	7.6
31	---	---	6.1	4.4	---	---	7.3	5.9	7.9	6.3	---	---
MONTH	14.7	8.6	10.0	4.4	---	---	7.8	4.5	9.1	3.4	8.7	4.3
YEAR	14.7	1.7										

MUSKINGUM RIVER BASIN

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	18.0	15.0	13.5	5.0	2.5	10.5	8.0	3.0	3.0	9.0	6.5
2	20.0	18.0	16.5	15.0	2.5	1.5	12.5	7.0	4.5	2.5	9.5	4.0
3	19.5	18.0	15.0	12.0	3.0	1.5	10.5	7.0	4.5	4.0	4.0	2.5
4	19.5	18.5	12.0	9.5	3.5	2.0	7.5	5.0	4.0	0.5	3.5	2.5
5	18.5	17.0	9.5	8.0	5.0	3.5	5.5	4.0	1.5	0.5	3.5	2.5
6	17.0	15.5	9.5	8.0	7.0	5.0	4.0	3.5	3.0	1.5	3.0	1.5
7	15.5	13.5	8.0	6.0	8.5	6.5	6.0	3.5	2.5	1.5	5.5	2.5
8	13.5	11.5	7.0	5.5	7.5	6.5	6.5	3.5	1.5	0.5	5.0	3.0
9	13.5	12.5	6.0	5.5	7.0	6.5	7.5	4.5	---	---	3.5	2.0
10	13.5	12.5	7.5	6.0	9.5	7.0	5.5	4.5	---	---	4.5	2.5
11	12.5	11.5	8.0	6.0	9.5	7.5	5.0	4.0	---	---	5.5	3.5
12	12.5	10.5	8.5	7.0	7.5	6.0	5.5	4.0	---	---	7.0	5.5
13	13.0	11.0	9.5	8.0	6.5	5.5	7.0	4.5	---	---	7.0	6.5
14	14.5	13.0	10.5	8.0	5.5	4.5	6.0	3.0	---	---	7.0	4.5
15	14.5	12.5	12.5	10.0	9.0	5.5	---	---	4.0	3.5	5.0	4.5
16	15.5	14.0	11.5	11.0	8.5	7.5	---	---	4.0	3.0	6.0	5.0
17	15.0	14.0	11.0	9.5	7.5	5.0	---	---	5.0	3.0	6.0	5.0
18	15.0	13.5	11.5	9.5	5.0	3.5	---	---	5.5	4.0	5.0	4.5
19	15.0	13.0	12.0	9.5	3.5	2.5	---	---	4.5	2.5	6.0	4.0
20	15.0	13.0	9.5	8.0	4.0	3.0	4.5	4.0	3.0	1.5	6.0	5.0
21	16.0	14.0	8.0	6.0	5.0	4.0	4.5	4.0	4.5	2.0	7.5	5.0
22	15.5	15.0	5.5	4.0	4.5	3.0	6.0	4.0	4.5	3.5	8.0	6.0
23	16.0	15.5	4.0	3.0	4.0	2.5	5.5	4.5	3.5	2.0	6.0	4.5
24	16.0	15.0	4.5	3.5	5.5	4.0	5.5	4.5	4.0	3.0	5.0	4.0
25	15.0	14.5	5.5	4.5	5.0	4.0	5.5	2.0	6.0	4.0	4.5	3.5
26	15.5	14.0	6.0	5.5	7.0	5.0	2.0	1.0	5.5	4.0	5.5	3.0
27	15.5	13.5	6.0	5.5	8.5	7.0	3.0	0.5	4.5	2.5	7.0	5.0
28	15.5	14.0	6.0	5.5	9.0	6.5	2.0	1.0	6.5	4.5	7.5	5.0
29	15.0	13.0	6.0	5.5	6.5	5.0	4.0	0.5	7.5	5.5	6.5	5.5
30	14.5	12.5	6.0	5.0	11.0	5.0	2.0	1.0	---	---	7.0	5.5
31	15.5	13.0	---	---	12.5	8.0	---	---	---	---	7.5	5.0
MONTH	20.0	10.5	16.5	3.0	12.5	1.5	12.5	0.5	7.5	0.5	9.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	15.5	13.5	17.5	15.0	22.0	17.5	21.5	19.5	21.0	19.0
2	6.5	5.5	16.5	14.5	20.0	16.5	21.5	20.0	21.0	20.0	20.5	19.5
3	8.5	5.0	17.0	15.0	21.5	18.5	20.5	19.0	20.5	20.0	20.0	18.0
4	8.5	7.0	16.5	14.5	22.0	19.5	20.0	18.0	19.5	18.5	18.5	17.0
5	9.5	6.5	16.5	14.0	22.0	18.5	20.0	18.5	19.0	16.5	17.5	16.0
6	11.5	8.5	17.0	14.5	21.5	20.0	20.0	17.5	18.0	17.0	18.0	15.5
7	10.5	4.5	17.5	15.5	21.5	18.0	20.5	18.0	19.5	17.0	18.5	16.5
8	5.5	4.0	16.5	15.0	22.0	18.5	20.5	18.0	18.0	17.0	18.5	17.5
9	7.5	4.0	15.0	12.0	22.0	19.5	21.0	19.0	17.0	16.5	18.0	16.5
10	9.0	6.5	15.0	11.0	20.5	18.0	22.0	19.5	---	---	17.0	15.0
11	11.0	8.5	16.5	12.5	18.5	15.5	24.0	21.0	---	---	17.5	16.0
12	13.0	10.0	18.0	14.5	19.5	16.0	23.5	22.0	---	---	18.5	17.0
13	15.5	12.0	17.0	15.0	19.0	18.0	23.0	21.0	---	---	20.0	18.0
14	15.0	13.0	17.5	15.0	21.5	18.5	24.5	22.0	---	---	20.5	19.0
15	15.5	13.0	17.0	16.0	21.5	20.5	23.5	21.5	21.0	19.5	19.5	18.0
16	15.5	14.0	17.0	16.0	22.5	20.0	22.0	20.0	19.5	17.5	20.5	19.0
17	15.5	13.0	18.5	15.5	21.5	20.0	21.5	19.0	21.0	18.5	21.5	19.5
18	16.5	13.5	19.5	16.5	22.5	19.5	24.0	20.5	22.0	20.0	21.0	20.5
19	16.0	15.0	21.0	18.0	24.0	21.0	24.5	22.0	23.0	21.0	20.5	20.0
20	15.5	12.0	21.0	18.5	23.0	20.5	25.0	22.0	24.0	22.0	20.5	19.0
21	12.0	10.0	22.0	19.0	21.0	18.5	25.5	23.5	23.0	21.0	23.0	17.5
22	12.5	11.0	22.5	20.0	18.5	15.5	25.5	23.5	22.5	20.5	20.5	18.0
23	14.5	12.0	23.0	19.5	15.5	14.0	---	---	21.0	19.5	18.0	16.5
24	13.0	12.0	22.5	19.5	14.0	14.0	---	---	22.0	20.5	17.5	16.0
25	13.5	11.5	23.0	20.0	16.0	14.0	---	---	22.5	20.5	18.5	17.5
26	13.0	11.0	21.5	19.5	17.0	15.5	---	---	22.5	21.0	19.5	18.0
27	13.5	11.0	20.5	18.0	19.5	16.0	20.5	20.0	22.5	20.5	19.5	17.5
28	14.0	11.5	20.0	17.5	20.0	18.0	21.0	19.5	21.0	19.5	17.5	16.5
29	13.5	12.5	20.0	17.0	19.5	18.5	20.5	18.5	21.5	19.0	17.5	17.0
30	14.5	12.5	19.5	18.0	19.0	18.0	21.5	18.5	21.5	19.0	17.0	13.5
31	---	---	18.5	16.0	---	---	21.5	19.0	21.0	19.0	---	---
MONTH	16.5	4.0	23.0	11.0	24.0	14.0	25.5	17.5	24.0	16.5	23.0	13.5
YEAR	25.5	0.5										

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, at gaging station on left bank 70 ft downstream from bridge on State Highway 208, 0.5 mile east of Dresden, and 0.5 mile downstream from Wakatomika Creek.

DRAINAGE AREA.--5,993 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966, 1969-72 (partial-record station).
Water temperatures: October 1952 to September 1961, October 1963 to September 1972.
Sediment records: October 1952 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 26.0°C July 23, 24; minimum, freezing point Jan. 17, 30.
Sediment concentrations: Maximum daily, 616 mg/l July 17; minimum daily, 8 mg/l on several days during November, December, and February.
Sediment discharges: Maximum daily, 19,900 tons Apr.13; minimum daily, 19 tons Nov. 8, 9.

Period of record:
Water temperatures (1952-60, 1964-72): Maximum, 31.0°C Aug. 4, 1955; minimum, freezing point on many days during 1952-59, 1965, 1967-72.
Sediment concentrations: Maximum daily, 1,600 mg/l Jan. 22, 1959; minimum daily, 1 mg/l on several days during 1952, 1954, 1956, and 1960.
Sediment discharges: Maximum daily, 160,000 tons Jan. 22, 1959; minimum daily, 2.7 tons Dec. 17, 1960.

REMARKS.--Flow is regulated by 15 flood control reservoirs at points 15 to 105 miles upstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
01...	1140	1050	--	--	170	300	--	1.6	7.2
DEC.									
01...	1210	2370	--	--	--	--	--	--	--
31...	1700	10300	--	--	--	--	--	--	--
MAR., 1972									
03...	1405	15100	--	--	--	--	--	--	--
14...	0930	14200	--	--	--	--	--	--	--
APR.									
22...	1600	23000	--	--	--	--	--	--	--
27...	1335	21900	--	--	95	41	--	1.6	7.1
JUNE									
01...	1230	3700	--	--	130	140	--	1.2	5.1
AUG.									
02...	1250	2070	160	0	130	250	.4	1.2	5.2

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971								
01...	--	--	--	450	--	1530	7.2	24.0
DEC.								
01...	--	--	--	--	--	1270	--	5.0
31...	--	--	--	--	--	--	--	5.5
MAR., 1972								
03...	--	--	--	--	--	--	--	5.0
14...	--	--	--	--	--	--	--	7.0
APR.								
22...	--	--	--	--	--	--	--	12.0
27...	--	--	--	190	--	468	7.9	12.5
JUNE								
01...	--	--	--	320	--	941	7.6	17.0
AUG.								
02...	.038	.12	764	410	280	1230	7.8	25.5

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT BETWEEN 0745 AND 1100)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.5	17.5	5.0	5.0	---	---	6.5	14.0	17.0	20.5	24.0	24.0
2	24.0	---	4.0	4.5	2.0	8.0	6.0	15.0	18.0	22.0	24.5	25.0
3	19.0	16.0	3.0	---	---	5.0	6.0	16.0	19.0	22.5	25.0	24.0
4	24.5	---	---	4.0	---	3.5	7.0	16.0	20.5	21.0	24.0	22.0
5	18.5	12.0	3.0	---	---	2.0	7.5	14.0	21.0	20.0	23.0	20.5
6	20.5	12.0	---	2.5	---	1.0	9.0	15.0	23.5	18.5	23.0	20.5
7	19.0	9.0	7.0	---	---	2.5	8.0	15.5	20.0	19.0	23.0	21.0
8	17.5	8.0	7.5	---	---	3.5	5.0	17.0	20.0	19.0	23.0	22.5
9	18.0	8.0	7.0	2.0	---	---	4.0	15.0	22.0	20.5	22.0	21.5
10	17.0	8.0	8.0	3.0	---	2.5	6.0	12.0	20.0	21.0	21.0	20.0
11	15.0	8.0	9.0	---	1.5	2.5	8.0	12.5	18.0	22.0	21.0	20.0
12	14.0	8.5	7.5	3.0	---	5.5	10.0	13.0	18.5	24.0	23.0	23.0
13	14.0	9.0	---	---	1.5	6.5	13.0	15.5	21.0	24.0	23.0	24.0
14	16.0	10.0	7.0	3.5	1.0	7.0	13.5	16.0	21.0	24.0	24.0	24.5
15	16.0	11.0	7.5	---	---	6.0	14.0	15.5	23.0	24.5	25.5	---
16	18.0	12.0	7.0	---	1.0	6.0	14.5	16.0	22.0	24.0	24.5	---
17	17.5	12.0	7.0	0.0	1.0	5.5	13.5	16.0	21.0	22.5	---	21.0
18	17.0	12.0	---	---	1.5	5.5	14.0	16.0	22.0	22.0	24.0	21.5
19	17.0	13.0	4.0	2.0	1.0	5.0	15.0	17.0	22.0	23.0	22.0	21.0
20	17.5	10.5	4.0	---	---	5.0	15.0	18.0	24.0	24.0	22.0	20.0
21	16.5	8.0	---	2.5	---	6.0	12.5	18.0	23.0	25.0	23.0	20.0
22	20.0	---	---	---	---	7.0	12.0	19.0	20.0	25.0	23.5	20.0
23	20.0	5.0	3.0	3.5	2.0	6.0	12.0	20.0	16.0	26.0	24.0	19.0
24	19.0	5.0	5.0	4.5	2.0	5.0	11.5	20.0	15.5	26.0	23.0	20.0
25	18.0	5.0	4.5	---	---	4.0	11.0	21.0	15.0	25.5	23.0	20.0
26	18.0	4.0	6.5	3.0	---	4.0	11.5	21.0	16.5	24.0	25.0	20.5
27	17.0	5.5	8.0	---	3.0	5.0	---	20.0	18.0	24.0	25.0	20.0
28	17.0	5.0	8.0	---	---	6.0	11.0	20.0	20.0	23.0	23.5	18.5
29	17.0	5.0	---	---	5.0	6.0	12.0	19.5	21.0	22.5	23.0	18.0
30	---	6.0	7.5	0.0	---	6.0	13.0	20.5	21.0	22.0	23.0	17.0
31	---	---	6.0	---	---	6.5	---	20.0	---	22.5	23.5	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1090	48	141	860	21	49	2380	13	84
2	1060	45	129	860	28	65	2550	13	90
3	1100	30	89	840	26	59	2600	11	77
4	1060	37	106	840	28	64	2490	11	74
5	1020	29	80	850	22	50	2450	8	53
6	933	35	88	830	19	43	2540	12	82
7	880	35	83	850	10	23	3520	74	744
8	860	43	100	870	8	19	6040	214	3490
9	880	39	93	890	8	19	7850	227	4810
10	988	38	101	850	10	23	7610	165	3390
11	1100	31	92	830	10	22	6590	103	1830
12	1180	28	89	840	11	25	5310	55	789
13	1130	24	73	830	13	29	4510	33	402
14	1050	25	71	850	13	30	4100	23	255
15	999	28	76	870	16	38	4780	37	478
16	966	25	65	850	15	34	7310	152	3000
17	988	25	67	944	13	33	8090	157	3430
18	999	23	62	1180	17	54	7050	82	1560
19	955	25	64	1350	18	66	5600	41	620
20	860	25	58	1470	19	75	4580	23	284
21	720	19	37	1660	17	76	4120	18	200
22	933	24	60	1710	11	51	3830	12	124
23	850	20	46	1680	10	45	3590	13	126
24	880	24	57	1640	10	44	3140	12	102
25	944	27	69	1660	9	40	2800	11	83
26	955	22	57	1660	9	40	2640	10	71
27	922	22	55	1710	10	46	2600	13	91
28	890	21	50	1800	8	39	2620	16	113
29	880	23	55	1990	8	43	2840	22	169
30	850	18	41	2190	13	77	3520	110	1120
31	850	22	50	--	--	--	8450	475	11700
TOTAL	29772	--	2304	36254	--	1321	138100	--	39441

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	10600	354	10100	2940	12	95	6530	39	688
2	9630	191	4970	2940	12	95	9430	122	3340
3	8330	102	2290	2960	14	112	14600	352	13900
4	7430	57	1140	2970	13	104	16100	247	10700
5	7530	50	1020	2790	15	113	15300	148	6110
6	7890	47	1000	2420	10	65	12900	100	3480
7	7350	33	655	2860	8	62	10500	62	1760
8	6310	25	426	2670	8	58	10100	64	1750
9	5350	23	332	2440	9	59	12100	97	3170
10	5260	19	270	2270	18	110	12100	92	3010
11	6310	31	528	2330	20	126	10700	58	1680
12	6400	37	639	2440	15	99	10400	43	1210
13	6380	32	551	2840	20	153	9930	74	1980
14	5470	25	369	4520	53	647	14500	274	10700
15	4950	22	294	7470	157	3170	16800	296	13400
16	4020	27	293	9780	144	3800	17500	193	9120
17	2860	16	124	11300	151	4610	20000	188	10200
18	3240	19	166	10400	121	3400	21600	153	8920
19	4200	42	476	9410	99	2520	21400	118	6820
20	3810	33	339	8230	55	1220	19500	83	4370
21	3600	20	194	7170	33	639	16800	68	3080
22	3520	16	152	5980	28	452	15200	73	3000
23	3760	25	254	6320	34	580	16200	86	3760
24	4490	32	388	6440	38	661	16800	87	3950
25	5180	40	559	5980	31	501	15500	57	2390
26	5240	33	467	5800	25	392	13900	42	1580
27	4810	24	312	6140	25	414	12000	41	1330
28	4490	20	242	6210	26	436	9870	44	1170
29	3910	15	158	5940	27	433	8990	52	1260
30	3620	13	127	--	--	--	9030	50	1220
31	3200	10	86	--	--	--	7670	38	787
TOTAL	169140	--	28921	151960	--	25126	423950	--	139835

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6840	37	683	13400	57	2060	3680	23	229
2	6250	28	473	13400	59	2130	3910	22	232
3	5960	24	386	11300	56	1710	3650	18	177
4	5720	25	386	11400	98	3020	3320	18	161
5	5510	28	417	9630	108	2810	3000	20	162
6	5310	27	387	8350	64	1440	2740	19	141
7	8210	307	8570	7470	51	1030	2560	18	124
8	16000	443	19100	6700	47	850	2440	20	132
9	15400	148	6150	7590	58	1190	2300	21	130
10	13400	93	3360	11200	119	3600	2190	20	118
11	11800	72	2290	14000	90	3400	2070	19	106
12	10700	69	1990	11800	75	2390	1990	20	107
13	14400	472	19900	10600	84	2400	2100	25	142
14	19600	370	19600	10100	73	1990	3650	130	1460
15	20800	208	11700	10800	78	2270	3600	193	1880
16	19600	132	6990	10600	63	1800	3890	104	1090
17	19600	132	6990	9520	55	1410	4440	78	935
18	20500	143	7920	8330	50	1120	3920	63	667
19	20300	155	8500	7550	53	1080	3260	45	396
20	20800	163	9150	6800	68	1250	2800	42	318
21	22400	197	11900	6140	48	796	2550	38	262
22	22700	163	9990	5540	32	479	2420	29	189
23	21200	128	7330	5130	14	194	2470	22	147
24	22200	104	6230	4780	23	297	2660	13	93
25	24000	105	6800	4390	35	415	3020	20	163
26	23300	86	5410	3960	27	289	3180	35	301
27	22000	70	4160	3600	27	262	3480	45	423
28	18500	63	3150	3320	26	233	3520	50	475
29	15800	63	2690	3120	23	194	3140	40	339
30	14200	57	2190	3020	25	204	3440	58	539
31	--	--	--	3210	29	251	--	--	--
TOTAL	473000	--	194792	246750	--	42564	91390	--	11638

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4340	85	996	2160	18	105	2210	32	191
2	4220	56	638	2050	17	94	2020	37	202
3	3680	54	537	2060	31	172	2000	34	184
4	4880	142	1870	2000	29	157	2060	38	211
5	6040	193	3150	1880	58	294	1930	28	146
6	5330	115	1650	1780	67	322	1840	27	134
7	4860	88	1150	1710	42	194	1720	48	223
8	4290	71	822	1670	46	207	1630	25	110
9	3880	70	733	1720	59	274	1540	23	96
10	4080	115	1270	1720	54	251	1460	41	162
11	4440	76	911	1630	49	216	1400	38	144
12	4880	83	1090	1570	40	170	1350	27	98
13	4460	121	1460	1520	22	90	1330	33	119
14	4920	242	3210	1510	28	114	1520	51	209
15	4290	117	1360	1450	42	164	4630	192	2720
16	4270	157	2040	1420	43	165	6400	210	3630
17	8490	616	14100	1670	33	149	5650	133	2030
18	11800	340	10800	4640	258	3860	4610	94	1170
19	12600	209	7110	5960	320	5150	3990	74	797
20	11700	128	4040	5510	135	2010	4070	69	756
21	10200	132	3640	4830	91	1190	3720	67	673
22	7170	130	2520	4120	66	734	3080	53	441
23	5600	106	1600	4040	80	873	2600	38	267
24	4830	72	939	4360	98	1150	2400	30	194
25	4240	60	687	3830	68	703	2380	29	186
26	3960	56	599	3240	50	437	2400	32	207
27	3570	44	424	3700	63	629	2740	42	311
28	3060	37	306	4180	87	982	4300	95	1100
29	2910	35	275	3620	72	704	5310	125	1790
30	2560	24	166	2980	45	362	6690	162	2930
31	2330	20	126	2510	35	237	--	--	--
TOTAL	167880	--	70219	87040	--	22159	88980	--	21433

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2104216
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 599753

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEM-PERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 31, 1971	1700	5.5	10300	658	18300	49	62	74	86	93	97	99	100	--	--	--
MAR. 3, 1972	1405	5.0	15100	402	16400	30	47	54	66	75	82	88	93	100	--	--
MAR. 14......	0930	7.0	14200	287	11000	46	58	71	83	92	95	96	100	--	--	--
APR. 22......	1600	12.0	23000	156	9690	47	62	70	78	87	91	93	95	100	--	--

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, at gaging station on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mile downstream from unnamed right bank tributary, and 2.0 miles upstream from Lake Fork.

DRAINAGE AREA.--116 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1970-72 (partial-record station).
Water temperatures: November 1970 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL RESI- DUE (MG/L)
OCT.												
07...	1045	2.2	312	0	--	11	.00	--	.020	--	372	393
07...	1345	2.2	--	--	--	--	--	--	--	--	--	--
21...	1130	3.2	324	0	--	10	.10	--	.050	--	366	382
NOV.												
04...	1045	4.0	340	0	--	11	.00	--	.10	--	379	419
04...	1315	3.8	--	--	--	--	--	--	--	--	--	--
23...	1030	3.4	--	--	--	--	--	--	--	--	--	--
DEC.												
14...	1130	30	212	0	--	24	5.1	23	.030	.09	390	433
14...	1215	32	--	--	--	--	--	--	--	--	--	--
JAN.												
12...	1330	142	144	0	--	16	7.2	32	.070	.22	280	304
FEB.												
09...	1015	31	251	0	--	21	2.7	12	.060	.18	360	400
MAR.												
17...	1530	550	--	--	--	--	--	--	--	--	--	--
21...	1100	130	174	0	--	16	3.9	17	.070	.22	298	311
APR.												
13...	1300	2670	--	--	--	--	--	--	--	--	--	--
24...	0930	253	158	0	46	10	3.4	15	.11	.34	236	290
MAY												
25...	0945	32	246	0	--	14	1.7	7.5	.020	.05	334	340
JUNE												
13...	1030	18	260	0	--	13	.90	3.9	.040	.12	316	350
27...	1000	15	274	0	--	23	1.0	4.6	.030	.09	356	386
27...	1100	15	--	--	--	--	--	--	--	--	--	--
AUG.												
14...	1500	6.7	--	--	--	--	--	--	--	--	--	--

DATE	TIME	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
07...	1045	220	33	--	--	--	--	--	--
21...	1130	290	50	1	0	6	140	<.5	.0
NOV.									
04...	1045	280	60	--	--	--	--	--	--
DEC.									
14...	1130	210	24	--	--	--	--	--	--
JAN.									
12...	1330	180	26	--	--	--	--	--	--
FEB.									
09...	1015	170	49	--	--	--	--	--	--
MAR.									
21...	1100	200	63	--	--	--	--	--	--
APR.									
24...	0930	550	52	--	--	--	--	--	--
MAY									
25...	0945	140	35	--	--	--	--	--	--
JUNE									
13...	1030	210	64	--	--	--	--	<.5	2.0
27...	1000	330	32	--	--	--	--	--	--

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO--Continued

EXTREMES.--1971-72:
Water temperatures: Maximum, 25.5°C July 24, 25; minimum, freezing point on several days during January and February.

Period of record:
Water temperatures: Maximum, 28.5°C June 30, July 9, 1971; minimum, freezing point on several days during winter periods.

REMARKS.--Samples for iron and manganese filtered clear when collected. Special samples were also collected twice a year to further define the quality of water. Continuous temperature recorder operated since November 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TURBIDITY (JTU)	FECAL COLIFORM (COL. PER 100 ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)
OCT.											
07...	300	44	596	7.7	14.5	6.0	58	1.6	10	80	480
07...	--	--	--	--	15.0	--	--	--	--	--	--
21...	310	44	614	7.9	15.0	6.8	67	1.1	5	32	340
NOV.											
04...	320	41	633	7.9	9.5	8.4	73	3.6	7	40	--
04...	--	--	--	--	9.5	--	--	--	--	--	--
23...	--	--	--	--	1.0	--	--	--	--	--	--
DEC.											
14...	290	120	577	8.0	3.0	12.2	90	.7	5	200	--
14...	--	--	--	--	3.0	--	--	--	--	--	--
JAN.											
12...	240	120	438	7.8	2.5	12.4	90	.2	10	78	--
FEB.											
09...	300	94	586	8.1	.0	13.4	92	.7	2	16	--
MAR.											
17...	--	--	--	--	7.0	--	--	--	--	--	--
21...	240	98	447	7.8	6.5	11.6	94	.8	10	15	--
APR.											
13...	--	--	--	--	15.0	--	--	--	--	--	--
24...	190	60	380	7.8	12.0	9.4	87	1.5	20	180	--
MAY											
25...	280	78	512	7.9	18.5	7.2	76	3.2	2	200	--
JUNE											
13...	280	66	535	7.9	18.0	6.6	69	2.8	3	1300	6200
27...	300	75	560	7.9	17.0	8.0	82	.8	6	210	1200
27...	--	--	--	--	17.0	--	--	--	--	--	--
AUG.											
14...	--	--	406	--	23.5	--	--	--	--	--	--

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	20.0	16.0	14.0	4.0	3.0	5.0	3.0	1.0	0.5	8.0	6.0
2	23.0	20.0	17.0	15.0	3.0	1.5	4.5	4.0	1.0	0.0	8.5	5.0
3	23.0	20.0	16.5	13.5	2.0	1.5	4.5	1.5	1.5	0.0	5.0	3.0
4	21.5	20.5	13.5	10.5	2.0	1.0	4.0	3.5	1.5	1.0	4.5	2.0
5	21.5	19.0	11.0	8.0	2.0	1.5	4.0	3.0	2.0	0.5	3.0	1.5
6	20.5	18.0	9.5	8.0	3.0	2.0	3.0	1.0	1.0	0.5	2.0	1.0
7	18.0	15.5	8.0	6.0	6.0	3.0	1.5	0.5	4.0	0.5	5.0	1.0
8	16.0	13.5	7.0	4.5	6.5	6.0	1.5	0.5	5.5	0.5	5.0	3.0
9	15.0	14.0	5.5	4.5	7.0	6.5	1.5	1.0	2.0	0.5	3.0	1.0
10	14.5	13.0	5.5	4.5	9.0	7.0	3.5	1.5	4.5	0.5	3.5	1.0
11	14.0	11.5	6.0	4.0	9.5	8.5	5.0	3.5	1.5	0.0	3.5	2.0
12	14.0	11.0	6.5	4.5	9.0	5.5	4.5	2.0	1.0	0.0	8.0	3.5
13	14.0	10.5	8.0	6.0	6.0	5.0	4.5	2.0	0.5	0.5	9.0	7.0
14	15.5	13.0	8.5	6.0	5.5	4.0	4.0	1.5	0.5	0.0	9.5	5.0
15	15.0	12.0	11.5	8.5	7.0	3.5	5.0	1.5	0.5	0.0	5.0	4.0
16	15.0	14.0	11.5	9.5	8.0	8.0	6.5	1.0	1.0	0.0	6.0	4.5
17	16.0	13.5	11.0	8.5	8.0	5.5	1.5	0.0	1.0	0.5	6.0	5.0
18	16.0	14.0	10.0	8.0	5.5	3.0	0.5	0.0	1.5	0.5	6.0	4.5
19	16.0	13.5	10.5	9.5	2.0	1.0	0.5	0.0	1.5	1.0	6.5	4.0
20	16.0	13.5	9.5	7.0	3.0	1.5	0.5	0.0	1.5	1.0	6.5	5.5
21	17.0	14.0	7.0	5.5	3.5	3.0	2.0	1.0	1.5	0.0	8.5	5.5
22	17.0	15.5	5.5	3.5	4.0	2.0	3.5	1.5	2.0	1.5	9.0	6.5
23	16.0	15.5	4.0	3.0	3.0	1.0	4.0	3.5	1.5	0.5	6.5	4.0
24	16.0	15.5	4.0	3.5	4.5	1.5	4.5	4.0	2.0	0.5	4.5	3.0
25	15.5	15.0	4.0	3.0	4.5	3.5	5.5	2.0	3.5	1.5	4.5	3.5
26	16.0	14.5	4.0	3.5	6.0	3.5	1.5	1.0	4.0	3.5	5.5	3.0
27	16.0	14.0	3.5	3.0	8.0	6.0	1.5	1.0	4.0	2.0	8.0	5.5
28	16.5	14.0	4.0	3.5	9.0	6.5	1.5	0.5	4.5	3.0	8.0	6.0
29	16.0	13.5	4.0	3.5	6.5	4.0	4.0	0.0	6.5	4.5	8.0	5.5
30	15.5	13.0	4.5	4.0	8.5	3.5	1.5	1.0	---	---	6.5	5.0
31	16.0	13.5	---	---	8.5	5.0	4.0	0.5	---	---	7.0	5.0
MONTH	23.5	10.5	17.0	3.0	9.5	1.0	6.5	0.0	6.5	0.0	9.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	17.0	15.0	15.5	14.0	21.5	17.0	23.5	20.5	21.0	19.5
2	6.0	5.0	17.0	15.5	18.0	15.0	21.5	19.5	23.0	21.0	21.5	20.0
3	6.5	4.5	17.0	15.0	20.5	17.0	20.5	19.5	23.0	21.0	21.5	19.0
4	9.0	6.5	16.0	14.0	21.0	18.5	20.5	18.0	23.0	20.5	20.0	18.0
5	9.5	6.5	14.5	11.0	21.0	18.0	19.5	18.0	22.0	19.0	19.5	17.0
6	12.0	8.5	16.5	14.0	21.0	19.0	20.0	15.5	21.5	19.0	18.5	16.0
7	11.5	3.5	18.0	16.0	20.0	17.0	21.5	16.5	23.0	19.0	19.0	16.5
8	4.5	1.5	18.0	15.5	20.5	17.0	21.0	16.5	21.0	19.5	19.0	18.0
9	7.0	3.0	15.5	12.0	21.0	18.5	24.0	15.0	19.5	18.5	19.5	17.0
10	8.0	6.0	14.0	9.5	20.5	18.0	24.0	19.0	19.5	16.0	19.0	16.0
11	10.5	8.0	15.0	11.0	19.0	15.0	23.5	19.0	19.5	16.5	18.0	16.5
12	12.0	9.5	16.0	13.0	18.5	15.5	24.0	21.5	20.0	18.5	19.0	18.0
13	16.0	12.0	16.0	14.5	18.5	18.0	24.0	21.5	22.0	19.5	21.0	18.5
14	16.0	12.0	15.0	13.0	20.5	17.0	22.0	20.5	23.5	19.5	21.0	20.0
15	14.5	12.0	15.0	14.0	21.0	20.0	22.0	21.0	24.5	21.0	20.0	18.0
16	14.5	13.5	15.5	14.0	20.5	19.0	21.0	19.5	23.5	19.5	19.0	17.0
17	14.5	10.5	15.5	14.0	20.5	19.0	21.5	19.0	23.0	19.5	20.5	18.0
18	15.0	11.0	16.5	14.5	20.5	18.0	22.0	20.0	21.0	19.5	20.5	19.5
19	15.0	13.0	18.0	15.5	21.5	19.0	23.5	22.0	21.0	19.0	20.5	19.5
20	13.5	13.0	18.0	17.0	21.5	20.5	24.0	21.5	20.5	18.5	20.5	18.0
21	13.0	9.0	19.0	16.5	20.5	18.5	25.0	23.5	21.0	19.0	19.5	16.5
22	11.5	9.5	20.0	18.0	18.5	15.5	25.0	23.5	21.0	20.0	19.0	17.0
23	13.5	11.0	20.5	18.0	15.0	13.5	25.0	23.5	20.5	19.5	18.0	15.5
24	13.5	11.5	20.5	18.5	13.5	13.0	25.5	24.5	21.0	20.0	16.0	15.5
25	13.0	10.5	21.0	18.5	15.5	13.5	25.5	23.0	21.5	20.5	18.0	16.0
26	12.0	10.0	20.5	18.5	18.0	14.5	24.5	21.0	23.0	21.0	18.5	18.0
27	13.0	10.5	20.5	17.0	19.0	16.0	23.0	20.5	22.0	21.0	18.5	18.0
28	13.0	11.0	20.0	16.5	20.0	18.0	21.5	20.0	21.5	20.0	18.0	16.0
29	13.5	11.5	19.5	16.5	20.5	19.0	21.5	19.5	21.5	19.0	16.5	16.0
30	15.5	13.0	19.0	17.0	19.0	18.0	21.5	19.0	21.5	19.0	16.5	14.0
31	---	---	18.0	15.5	---	---	23.0	19.5	21.0	19.0	---	---
MONTH	16.0	1.5	21.0	9.5	21.5	13.0	25.5	15.0	24.5	16.0	21.5	14.0
YEAR	25.5	0.0										

03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
07...	1345	15.0	2.2	15	.09
21...	1130	15.0	3.2	50	.43
NOV.					
04...	1315	9.5	3.8	11	.11
23...	1030	1.0	3.4	28	.26
DEC.					
14...	1215	3.0	32	6	.52
JAN.					
12...	1330	2.5	142	8	3.1
MAR.					
17...	1530	7.0	550	64	95
21...	1100	6.5	130	11	3.9
APR.					
13...	1300	15.0	2670	835	6020
24...	0930	12.0	253	30	20
JUNE					
27...	1100	17.0	15	26	1.1

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR.									
13...	1300	57	71	80	86	92	96	99	100

03146500 LICKING RIVER NEAR NEWARK, OHIO

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 14 T.2 N., R.11 W., Licking County, at gaging station on right bank at downstream side of Stadden Bridge, 1.0 mile downstream from Shawnee Run, 1.5 miles upstream from Equality Run, and 3.5 miles east of Newark.

DRAINAGE AREA.--537 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1972.
Water temperatures: June 1962 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,400 micromhos Nov. 18; minimum, 180 micromhos Aug. 18.
pH: Maximum, 8.3 May 6, 7; minimum, 5.6 July 11.
Dissolved oxygen: Maximum, 13.1 mg/l May 10; minimum, 1.7 mg/l Sept. 22.

Period of record:
Specific conductance (1969-72): Maximum, 1,650 micromhos Feb. 4, 1971; minimum, 156 micromhos July 25, 1971.
pH (1971-72): Maximum, 8.3 May 6, 7, 1972; minimum, 5.6 July 11, 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
07...	1600	61	236	0	110	240	.7	12
14...	1605	64	196	6	96	65	.5	5.0
27...	1200	--	--	--	--	--	--	--
NOV.								
11...	1600	54	224	0	110	170	.6	14
28...	1605	191	130	0	56	64	.3	4.0
DEC.								
13...	1600	131	209	0	95	74	.3	4.9
16...	1730	854	141	0	68	34	.2	4.7
JAN.								
06...	1610	762	138	4	65	28	.3	5.8
31...	1530	150	216	10	94	88	.4	5.1
FEB.								
03...	1600	150	218	0	89	94	.5	6.8
17...	1605	1230	118	0	52	28	.3	4.0
MAR.								
13...	1600	624	178	5	71	28	.2	3.5
23...	1600	1490	122	0	52	18	.1	3.9
APR.								
20...	1600	3980	104	0	39	11	.2	2.6
MAY								
09...	1210	3620	136	0	42	19	.2	2.3
25...	1600	310	224	2	82	52	.3	3.8
JUNE								
01...	1605	414	210	0	71	53	.3	3.6
09...	1120	183	218	10	92	130	.5	5.0
09...	1200	--	--	--	--	--	--	--
JULY								
17...	1600	630	184	0	51	29	.2	4.5
31...	1600	100	218	0	96	77	.4	4.3
AUG.								
14...	1600	83	202	3	110	96	.4	12
21...	1600	528	189	0	58	29	.2	2.6
SEP.								
28...	1600	1030	143	0	45	21	.2	2.2

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1971-72): Maximum, 13.1 mg/l May 10, 1972; minimum, 1.7 mg/l Sept. 22, 1972.
Water temperatures (1962-68, 1969-70): Maximum, 29.0°C Aug. 16, 17, 1965, Aug. 1, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since July 1968. Minimum recorded specific conductance value of 100 micromhos occurred Aug. 18, 1969. Maximum recorded pH value of 10.0 occurred Sept. 3, 10, 1969. Minimum recorded pH value of 4.5 occurred May 24, 1970. Minimum recorded dissolved oxygen concentrations of 0.0 mg/l occurred Aug. 30 to Sept. 1, 1970. Maximum recorded temperature value of 31.5°C occurred July 14, 15, 1972. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

REVISIONS.--Revised concentrations for dissolved oxygen for water year 1969 superseding those previously published are given on page 60.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
07...	55	756	340	150	1310	--	--
14...	22	446	290	120	760	--	--
27...	--	--	--	--	--	<.5	17
NOV.							
11...	60	702	330	150	1230	--	--
28...	17	308	170	64	556	--	--
DEC.							
13...	22	460	290	120	763	--	--
16...	21	286	220	100	495	--	--
JAN.							
06...	26	306	220	100	468	--	--
31...	23	570	330	140	854	--	--
FEB.							
03...	30	562	310	130	849	--	--
17...	18	268	180	84	412	--	--
MAR.							
13...	15	330	250	96	536	--	--
23...	17	240	170	70	370	--	--
APR.							
20...	11	200	130	45	290	--	--
MAY							
09...	10	218	160	48	349	--	--
25...	17	422	280	92	688	--	--
JUNE							
01...	16	396	270	98	647	--	--
09...	22	588	310	110	973	--	--
09...	--	--	--	--	--	<.5	10
JULY							
17...	20	326	230	79	498	--	--
31...	19	506	300	120	792	--	--
AUG.							
14...	53	582	320	150	892	--	--
21...	11	330	230	75	500	--	--
SEP.							
28...	9.7	260	180	63	392	--	--

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.4	0.3	---	---	---	---	---	---	12.2	11.7	10.7	10.6
2	0.6	0.4	---	---	---	---	---	---	---	---	10.6	10.3
3	1.5	0.5	---	---	---	---	---	---	---	---	---	---
4	1.6	0.8	---	---	---	---	---	---	---	---	---	---
5	1.7	1.0	5.9	3.7	---	---	---	---	---	---	---	---
6	2.0	1.3	5.2	1.7	11.4	10.6	---	---	---	---	---	---
7	1.9	1.2	2.1	1.3	11.6	10.7	---	---	---	---	---	---
8	1.6	1.2	5.6	1.2	11.2	10.4	---	---	---	---	---	---
9	1.9	1.6	6.8	4.2	11.6	10.1	---	---	---	---	---	---
10	2.7	1.4	7.3	5.8	10.6	9.4	---	---	---	---	---	---
11	3.1	0.6	6.9	6.0	---	---	---	---	---	---	---	---
12	2.0	0.7	6.0	4.2	---	---	---	---	---	---	---	---
13	3.8	0.2	7.5	5.6	---	---	---	---	---	---	---	---
14	3.8	0.6	7.0	5.8	---	---	---	---	---	---	---	---
15	3.6	0.9	6.1	3.4	---	---	---	---	---	---	---	---
16	2.3	0.8	7.3	3.2	---	---	---	---	---	---	---	---
17	2.5	1.0	6.6	5.8	---	---	---	---	---	---	---	---
18	1.2	0.9	6.7	5.9	---	---	---	---	---	---	---	---
19	1.1	0.8	8.3	6.7	---	---	---	---	---	---	---	---
20	2.6	0.8	9.8	8.3	---	---	---	---	---	---	---	---
21	2.6	1.5	9.9	6.5	---	---	---	---	---	---	---	---
22	2.1	1.8	9.8	9.3	---	---	---	---	---	---	---	---
23	2.0	1.9	9.7	8.3	---	---	---	---	---	---	---	---
24	2.2	1.8	8.5	8.0	---	---	---	---	---	---	---	---
25	2.0	1.9	---	---	---	---	---	---	---	---	---	---
26	2.5	2.0	---	---	---	---	---	---	---	---	---	---
27	2.6	2.4	---	---	---	---	---	---	---	---	---	---
28	3.2	2.6	---	---	---	---	---	---	---	---	---	---
29	3.1	2.6	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	12.3	11.1	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	2.0	1.8	---	---	2.0	1.2	5.2	3.7
2	---	---	---	---	5.9	1.4	---	---	2.7	1.1	4.7	2.8
3	9.8	7.1	---	---	8.2	3.6	---	---	2.9	1.9	4.7	2.6
4	9.2	6.8	---	---	5.7	1.9	---	---	2.0	1.1	4.5	2.6
5	8.9	7.3	---	---	3.3	1.2	---	---	2.9	1.2	4.0	3.2
6	9.5	7.4	---	---	2.2	1.2	---	---	5.3	1.3	4.0	3.2
7	9.2	7.8	---	---	---	---	---	---	5.8	3.3	4.2	2.8
8	10.4	8.0	---	---	---	---	---	---	4.4	3.7	5.2	4.2
9	10.4	8.7	---	---	---	---	---	---	4.7	3.9	5.0	4.0
10	9.7	8.5	---	---	---	---	---	---	6.0	4.1	4.8	3.7
11	9.5	7.9	---	---	---	---	---	---	6.0	4.4	4.7	3.8
12	8.9	7.6	---	---	---	---	---	---	4.7	3.8	4.2	3.1
13	9.0	7.4	---	---	---	---	---	---	4.3	3.0	---	---
14	10.2	7.3	---	---	---	---	---	---	3.5	2.6	---	---
15	9.1	6.5	---	---	---	---	---	---	3.2	2.6	6.4	4.9
16	10.0	6.7	7.4	6.5	---	---	---	---	4.7	3.2	4.9	1.8
17	11.8	6.4	7.2	6.2	---	---	---	---	4.5	2.0	4.1	2.3
18	8.0	5.1	7.7	5.5	---	---	---	---	7.3	2.1	3.7	2.2
19	10.7	6.6	8.2	6.2	---	---	---	---	6.4	5.9	7.9	2.6
20	11.5	9.5	8.3	6.6	---	---	---	---	6.4	5.7	5.9	3.0
21	10.0	9.0	7.9	5.4	---	---	---	---	7.5	6.0	4.0	1.2
22	10.0	9.2	7.2	4.2	---	---	---	---	7.3	5.6	1.4	1.1
23	9.8	9.2	5.6	4.0	---	---	---	---	6.5	5.2	4.3	1.2
24	---	---	5.2	3.0	---	---	---	---	6.1	4.6	---	---
25	---	---	4.3	2.8	---	---	6.0	4.2	6.0	4.4	6.5	4.8
26	---	---	4.3	3.0	---	---	4.4	3.3	4.8	4.3	4.8	2.3
27	---	---	---	---	---	---	3.6	2.3	5.1	4.0	2.7	1.5
28	---	---	5.6	2.6	---	---	5.6	3.2	4.6	3.4	3.8	1.9
29	---	---	2.8	2.0	---	---	5.4	4.6	4.2	3.3	2.7	1.9
30	---	---	---	---	---	---	4.7	3.2	3.4	2.6	1.9	1.0
31	---	---	---	---	---	---	3.4	2.0	4.0	2.7	---	---

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1100	846	1290	750	609	549	473	437	873	816	534	489
2	1230	1080	1300	1050	585	516	486	456	939	681	495	330
3	1270	1040	1190	1030	552	486	514	463	867	720	480	300
4	1300	1140	1200	1100	702	540	514	466	744	714	441	411
5	1340	1110	1210	891	732	645	517	469	747	738	462	441
6	1370	1180	894	840	759	582	485	445	750	744	534	459
7	1340	1150	855	759	660	420	540	485	753	741	576	534
8	1320	1200	957	780	540	465	570	522	759	747	600	414
9	1340	897	1260	957	534	480	579	516	759	753	507	411
10	1380	834	1340	1180	549	492	516	423	771	750	546	492
11	1260	1090	1300	1080	510	468	426	396	783	768	594	528
12	1190	1110	1120	879	624	495	465	426	---	---	582	525
13	1220	957	894	846	840	612	519	465	---	---	576	519
14	987	780	861	804	951	573	528	513	591	519	522	474
15	867	798	894	801	633	441	---	---	567	369	---	---
16	858	828	918	870	483	438	---	---	393	315	459	417
17	882	831	1220	888	540	459	---	---	420	348	417	375
18	873	822	1400	1220	579	507	678	603	444	408	405	384
19	855	831	1390	1060	603	570	744	642	435	429	456	405
20	867	849	1190	825	711	576	834	657	---	---	504	456
21	915	867	828	753	630	585	843	675	---	---	522	498
22	903	861	1160	771	611	582	723	594	555	540	519	393
23	876	831	1160	1090	684	591	687	543	612	537	393	351
24	840	807	1180	1150	697	525	600	537	609	558	447	393
25	858	804	1230	558	588	546	585	537	630	594	468	447
26	885	840	558	504	587	500	660	573	621	525	495	465
27	870	834	522	435	630	487	729	606	567	513	510	492
28	852	822	534	502	621	392	762	666	576	513	507	489
29	1310	843	549	435	428	329	---	---	588	513	525	501
30	1220	897	549	450	539	350	---	---	---	---	546	501
31	903	687	---	---	---	---	---	---	---	---	537	489
MONTH	1380	687	1400	435	951	329	843	396	939	315	600	300

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	507	489	675	588	696	633	759	684	852	774	942	813
2	513	507	687	624	729	684	729	630	882	774	1020	759
3	585	513	624	537	720	618	639	588	885	708	903	669
4	582	555	621	567	639	624	639	606	870	831	744	666
5	570	525	615	588	750	630	732	603	876	741	963	675
6	579	486	624	567	917	731	780	699	864	678	945	747
7	624	480	591	573	1010	443	870	759	747	528	921	747
8	744	372	702	561	1050	484	879	660	882	747	900	825
9	417	369	561	276	1010	632	756	552	888	642	927	771
10	480	417	393	279	915	783	636	504	870	786	867	690
11	495	477	495	393	900	657	714	615	897	795	891	696
12	516	495	549	474	900	669	834	699	945	780	891	753
13	510	330	546	453	1030	762	978	708	927	690	897	861
14	---	---	474	297	915	705	819	567	915	690	918	804
15	---	---	408	312	852	591	---	---	879	735	882	735
16	---	---	468	366	783	645	---	---	1150	822	780	714
17	366	333	498	468	771	642	471	447	1040	237	780	669
18	480	366	531	492	666	576	558	471	240	180	792	672
19	516	474	567	525	789	591	651	558	327	240	894	789
20	498	318	636	567	819	669	708	621	390	327	933	789
21	435	345	648	558	924	759	813	663	510	390	939	813
22	420	333	666	558	870	762	792	672	576	510	927	807
23	405	348	723	645	801	744	744	606	558	468	912	804
24	468	405	744	630	813	654	717	615	612	516	885	429
25	495	465	762	648	660	645	789	627	711	600	804	696
26	534	492	771	669	801	645	819	681	735	618	798	438
27	588	534	717	609	852	771	774	597	684	564	483	282
28	618	561	654	609	846	759	789	648	723	585	420	285
29	615	570	642	501	786	546	816	657	813	714	474	414
30	591	579	828	498	744	651	768	612	837	714	444	249
31	---	---	678	453	---	---	801	618	828	726	---	---
MONTH	744	318	828	276	1050	443	978	447	1150	180	1020	249
YEAR	1400	180										

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.4	7.6	7.3	7.9	7.7	7.6	7.4	7.6	7.0	7.4	7.2
2	7.5	7.3	7.5	7.2	7.9	7.8	7.9	7.6	7.2	7.1	7.3	7.1
3	7.6	7.3	7.5	7.3	7.8	7.7	8.0	7.8	7.2	7.1	7.1	6.9
4	7.6	7.3	7.6	7.5	7.7	7.6	7.9	7.8	7.6	7.2	7.2	7.1
5	7.8	7.4	7.6	7.4	7.6	7.5	8.0	7.9	7.4	7.3	7.3	7.2
6	7.8	7.5	7.5	7.4	7.5	6.4	7.9	7.9	7.4	7.3	7.3	7.2
7	7.9	7.5	7.6	7.3	7.3	6.7	7.9	7.6	7.5	7.3	7.4	7.3
8	7.9	7.6	7.7	7.3	7.5	7.3	7.9	7.8	7.5	7.3	7.3	7.2
9	7.8	7.4	7.6	7.5	7.7	7.6	7.9	7.7	7.5	7.3	7.3	7.2
10	7.6	7.2	7.5	7.5	7.7	7.6	7.9	7.7	7.8	7.5	7.4	7.3
11	7.7	7.4	7.6	7.5	7.7	7.6	7.8	7.7	7.5	7.4	7.4	7.3
12	7.7	7.5	7.6	7.5	7.7	7.6	7.8	7.5	7.5	7.0	7.4	7.3
13	7.6	6.6	7.6	7.4	7.8	7.6	7.8	7.6	7.2	7.0	7.5	7.2
14	7.7	7.4	7.6	7.4	7.8	7.7	7.9	7.8	7.4	6.9	7.3	7.3
15	7.6	7.2	7.6	7.4	7.8	7.2	---	---	7.2	6.9	---	---
16	7.5	7.3	7.5	7.4	7.8	7.7	---	---	7.1	6.6	7.3	6.5
17	7.6	7.3	7.6	7.3	7.9	7.7	---	---	7.2	7.0	7.5	7.2
18	7.6	7.3	7.5	7.3	7.9	7.8	7.6	7.4	7.2	7.2	7.5	7.3
19	7.5	7.4	7.5	7.3	7.9	7.8	7.7	7.5	7.2	7.2	7.4	7.3
20	7.6	7.3	7.5	7.4	7.8	7.6	7.6	7.4	---	---	7.5	7.3
21	7.6	7.3	7.6	7.4	7.9	7.7	7.6	7.5	---	---	7.5	7.3
22	7.5	7.3	7.8	7.5	7.9	7.8	7.6	7.5	7.1	6.9	7.3	7.2
23	7.3	7.2	7.8	7.5	7.8	7.8	7.6	7.4	7.5	7.1	7.4	7.1
24	7.3	7.2	7.6	7.5	7.8	7.7	7.6	7.5	7.5	7.3	7.4	7.3
25	7.3	7.1	7.7	7.5	7.8	7.6	7.5	7.4	7.4	7.3	7.4	7.3
26	7.5	7.2	7.8	7.6	7.6	7.3	7.5	7.4	7.5	7.2	7.4	7.3
27	7.6	7.4	7.8	7.5	7.7	7.4	7.4	7.3	7.5	7.3	7.5	7.2
28	7.6	7.4	7.8	7.6	7.9	7.5	7.4	7.3	7.4	7.2	7.6	7.3
29	7.6	7.4	7.7	7.0	7.9	7.8	7.5	7.3	7.5	7.2	7.4	7.3
30	7.5	7.3	7.9	7.6	7.8	7.5	7.5	7.4	---	---	7.7	7.3
31	7.6	7.1	---	---	---	---	7.6	7.4	---	---	7.7	7.3
MONTH	7.9	6.6	7.9	7.0	7.9	6.4	8.0	7.3	7.8	6.6	7.7	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.3	8.1	7.8	7.7	7.6	8.0	7.7	7.8	7.2	7.6	7.2
2	7.7	7.3	8.1	7.8	7.9	7.4	8.0	7.7	7.5	7.2	7.7	7.2
3	8.0	7.3	8.2	7.8	8.0	7.7	7.9	7.5	7.5	7.2	7.4	7.2
4	7.8	7.1	8.2	7.8	7.9	7.6	8.1	7.6	7.6	7.2	7.7	7.3
5	7.8	7.2	8.2	7.8	7.9	7.6	8.0	7.6	7.7	7.2	7.7	7.3
6	7.9	7.2	8.3	7.8	7.7	7.6	8.1	7.5	7.6	7.2	7.6	7.3
7	7.4	7.0	8.3	7.8	7.7	7.6	8.0	7.7	7.5	7.2	7.7	7.3
8	7.1	6.9	8.0	7.8	7.7	7.5	8.1	7.6	7.6	7.3	7.5	7.2
9	7.2	7.0	8.1	7.8	7.8	7.5	8.1	7.5	7.6	7.2	7.6	7.2
10	7.3	7.2	7.9	7.7	7.8	7.5	7.9	7.5	7.6	7.3	7.5	7.2
11	7.3	7.2	7.9	7.7	7.8	7.6	8.0	5.6	7.6	7.3	7.4	7.2
12	7.4	7.3	8.0	7.8	7.8	7.6	7.4	6.4	7.5	7.2	7.4	7.2
13	7.2	7.0	8.0	7.8	7.6	7.5	7.7	7.2	7.6	7.2	7.4	7.2
14	---	---	8.0	7.7	7.9	7.6	---	---	7.5	7.2	7.3	7.1
15	---	---	8.0	7.7	7.7	7.5	---	---	7.5	7.2	7.5	7.1
16	---	---	8.0	7.8	7.9	7.5	---	---	7.4	7.2	7.5	7.3
17	7.8	7.6	8.1	7.8	7.9	7.6	---	---	7.7	7.2	7.4	7.2
18	8.1	7.7	8.0	7.7	7.8	7.6	7.5	7.3	7.8	7.5	7.2	7.1
19	8.1	8.0	8.1	7.8	7.6	7.5	7.5	7.3	7.7	7.5	7.4	7.1
20	8.1	8.0	8.0	7.8	7.7	7.5	7.6	7.3	7.7	7.5	7.4	7.2
21	8.1	8.0	8.1	7.8	7.6	7.5	7.5	7.3	7.6	7.4	7.3	7.1
22	8.0	7.9	8.0	7.8	8.1	7.6	7.5	7.2	7.7	7.4	7.3	7.1
23	8.0	7.9	8.1	7.7	8.1	8.0	7.8	7.2	7.7	7.4	7.3	7.1
24	8.1	8.0	8.1	7.8	8.1	8.0	7.8	7.3	7.6	7.4	7.3	7.1
25	8.1	8.0	8.1	7.7	8.1	8.0	7.8	7.2	7.6	7.4	7.5	7.2
26	8.1	8.0	8.1	7.6	8.1	7.8	7.9	7.3	7.5	7.3	7.6	7.3
27	8.0	7.9	8.2	7.9	8.1	7.8	7.6	7.3	7.5	7.3	7.6	7.4
28	8.0	7.9	8.2	7.7	8.0	7.7	7.9	7.3	7.5	7.4	7.7	7.5
29	8.0	7.9	8.2	7.5	7.9	7.5	7.9	7.3	7.4	7.3	7.7	7.6
30	8.0	7.9	7.8	7.6	8.0	7.5	8.0	7.3	7.5	7.3	7.9	7.5
31	---	---	7.8	7.6	---	---	7.9	7.3	7.5	7.2	---	---
MONTH	8.1	6.9	8.3	7.5	8.1	7.4	8.1	5.6	7.8	7.2	7.9	7.1
YEAR	8.3	5.6										

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.2	2.1	2.3	2.1	---	---	11.0	10.1	9.6	9.3	9.1	7.8
2	2.2	2.0	2.2	2.1	---	---	11.1	10.6	9.3	8.6	8.5	7.8
3	2.3	2.0	2.6	2.2	---	---	11.7	11.1	8.6	8.0	9.7	8.0
4	2.2	2.0	2.9	2.6	---	---	11.2	10.4	8.5	8.3	9.8	9.4
5	2.3	2.2	3.2	2.9	---	---	11.2	10.6	---	---	9.8	9.3
6	2.3	2.2	3.2	2.9	---	---	11.4	10.9	---	---	9.9	9.2
7	2.5	2.3	3.6	3.2	---	---	11.5	9.6	---	---	9.4	8.3
8	2.6	2.4	3.8	3.5	---	---	10.1	9.4	---	---	9.8	8.5
9	4.2	2.4	3.7	3.5	10.7	9.7	9.5	9.1	---	---	10.0	9.4
10	2.6	2.5	3.6	3.4	9.8	8.2	9.7	8.7	---	---	10.2	9.4
11	2.7	2.5	3.7	3.3	9.3	7.9	9.5	9.0	---	---	9.9	8.7
12	2.7	2.5	3.5	3.2	8.4	7.5	9.4	8.7	---	---	9.0	8.1
13	2.6	2.3	3.4	3.2	8.7	7.5	10.1	8.5	6.5	5.6	8.5	7.7
14	2.4	2.3	3.4	3.1	9.3	8.7	10.7	10.2	9.9	6.3	---	---
15	2.5	2.3	3.1	2.8	9.4	8.3	---	---	10.0	7.9	---	---
16	2.3	2.3	3.5	2.9	8.3	7.3	---	---	9.7	8.8	9.1	8.7
17	2.4	2.3	3.6	3.4	7.8	6.9	---	---	9.7	9.0	---	---
18	2.4	2.2	---	---	8.5	7.3	8.6	7.5	10.0	9.4	---	---
19	2.4	2.2	---	---	8.0	7.0	8.6	8.2	9.6	9.3	10.1	8.8
20	2.4	2.2	---	---	8.6	6.5	9.0	8.2	---	---	9.4	7.8
21	2.3	2.1	---	---	8.6	7.9	8.5	8.0	---	---	9.5	8.5
22	2.2	2.1	---	---	9.5	8.2	8.7	8.2	11.0	10.4	9.1	7.8
23	2.2	2.2	---	---	9.9	8.1	8.7	7.9	10.8	9.9	9.7	9.1
24	2.2	2.2	---	---	9.6	9.1	8.8	8.0	10.0	9.2	9.8	9.2
25	2.3	2.2	---	---	9.4	9.0	8.6	7.7	9.6	8.6	9.7	8.9
26	2.3	2.2	---	---	9.0	8.3	8.6	7.5	9.7	8.3	9.5	8.4
27	2.2	2.0	---	---	9.3	8.2	7.5	6.9	10.0	8.9	9.2	8.0
28	2.2	2.1	---	---	9.2	8.2	7.1	6.8	9.9	8.7	9.3	8.0
29	2.4	2.1	---	---	9.6	8.8	---	---	10.0	8.2	8.7	8.0
30	2.4	2.2	---	---	10.1	8.9	---	---	---	---	10.4	8.1
31	2.3	2.1	---	---	---	---	---	---	---	---	10.3	8.5
MONTH	4.2	2.0	---	---	---	---	11.7	6.8	---	---	10.4	7.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.9	8.4	11.0	7.9	8.4	6.1	6.0	4.5	9.9	4.9	6.5	2.8
2	10.3	8.5	10.3	8.8	7.2	5.1	5.4	4.1	7.7	3.7	7.6	3.5
3	11.3	7.9	10.7	7.5	7.6	4.5	6.2	4.0	7.7	3.3	6.1	4.0
4	10.7	7.7	9.7	7.8	6.9	4.6	6.6	5.0	6.7	2.6	9.1	6.4
5	11.5	7.9	11.2	8.7	8.0	4.5	6.1	5.0	7.0	2.4	9.7	5.6
6	10.9	7.2	10.8	8.2	5.8	3.8	6.6	4.6	7.2	3.0	8.6	6.1
7	8.8	6.5	12.8	8.1	7.5	4.4	6.3	5.4	6.2	2.7	9.0	6.9
8	8.1	5.7	9.8	4.5	6.4	3.6	6.5	5.1	7.0	3.2	7.0	4.0
9	5.8	5.2	12.4	8.5	6.2	4.6	5.7	3.8	8.2	4.2	8.1	5.3
10	6.8	5.0	13.1	11.8	7.1	3.6	6.3	5.0	8.7	6.4	7.7	5.8
11	6.7	6.0	12.3	11.1	8.3	4.6	6.5	4.8	9.3	5.3	7.0	5.7
12	6.3	5.3	11.7	10.4	6.9	4.5	6.1	3.5	8.4	3.9	6.3	2.8
13	5.8	5.3	10.8	9.6	6.6	3.2	6.4	2.9	9.2	4.0	6.0	3.6
14	---	---	9.8	8.6	6.7	3.6	7.5	2.9	7.4	4.7	6.0	4.0
15	---	---	9.4	7.9	7.2	2.5	7.2	6.7	5.8	2.2	7.4	3.4
16	---	---	9.6	8.6	7.4	3.0	7.4	6.9	6.3	4.0	6.3	4.1
17	9.3	8.4	9.8	8.8	7.6	5.2	7.5	5.9	8.3	3.4	6.9	4.6
18	10.3	9.1	9.5	8.3	7.6	5.2	6.9	5.3	8.5	4.1	6.3	5.3
19	10.1	8.8	9.3	8.2	6.6	4.8	6.0	4.0	8.6	7.3	5.8	3.7
20	9.7	8.9	8.8	7.9	5.9	4.0	6.7	5.1	7.8	6.5	6.2	2.9
21	9.6	9.1	8.8	7.4	4.5	2.9	5.9	3.4	6.9	5.5	6.4	3.1
22	9.4	8.9	8.6	7.1	6.2	3.5	3.8	2.3	6.0	4.4	5.7	1.7
23	9.0	8.4	8.5	7.3	6.7	6.0	4.5	1.9	6.0	4.2	5.3	2.7
24	10.8	7.7	7.6	6.2	7.9	6.7	9.3	1.9	7.2	6.0	4.9	2.1
25	11.3	10.2	9.7	5.9	7.8	4.7	8.1	3.4	6.8	5.3	7.4	5.0
26	10.9	9.8	7.4	6.0	5.5	4.9	9.1	5.0	5.9	4.0	7.7	5.0
27	10.8	9.1	7.5	6.5	5.7	5.1	8.7	5.7	7.6	5.6	8.2	7.2
28	10.5	8.8	7.2	6.1	5.7	4.7	11.1	6.4	8.4	7.2	9.1	8.1
29	9.8	8.5	10.3	3.8	5.5	4.6	9.1	4.4	7.9	6.3	8.9	8.1
30	9.2	8.1	6.4	4.1	5.8	3.8	9.6	4.8	7.6	5.6	10.0	8.9
31	---	---	8.4	5.2	---	---	10.2	5.0	7.6	4.4	---	---
MONTH	11.5	5.0	13.1	3.8	8.4	2.5	11.1	1.9	9.9	2.2	10.0	1.7
YEAR	13.1	1.7										

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	6.0	4.5	4.5	4.0	11.5	8.5
2	---	---	---	---	---	---	5.5	4.5	6.5	3.0	11.5	7.0
3	---	---	---	---	---	---	5.5	3.0	5.5	2.5	8.0	4.0
4	---	---	---	---	---	---	5.5	4.0	2.5	0.5	5.0	3.0
5	---	---	---	---	---	---	4.5	3.0	---	---	4.0	2.5
6	---	---	---	---	---	---	3.0	1.5	---	---	5.5	1.0
7	---	---	---	---	---	---	3.0	1.0	---	---	8.0	3.5
8	---	---	---	---	---	---	3.5	1.0	---	---	7.5	3.5
9	---	---	---	---	9.0	8.0	4.0	3.0	---	---	4.5	2.0
10	---	---	---	---	11.5	9.0	5.0	3.5	---	---	6.5	2.0
11	---	---	---	---	11.0	8.0	5.0	4.0	---	---	9.0	3.5
12	---	---	---	---	9.0	6.0	4.5	3.0	---	---	11.5	8.0
13	---	---	---	---	8.5	7.0	7.0	4.0	6.0	3.0	13.5	10.0
14	---	---	---	---	7.0	5.5	4.0	2.0	3.0	2.0	12.0	8.5
15	---	---	---	---	10.0	6.0	---	---	---	---	---	---
16	---	---	---	---	9.5	8.5	---	---	3.5	2.0	6.0	5.5
17	---	---	---	---	8.5	4.5	---	---	3.5	1.5	7.0	6.0
18	---	---	---	---	4.5	2.5	5.0	3.5	4.0	2.5	---	---
19	---	---	---	---	4.5	2.5	6.0	5.0	3.0	3.0	9.5	5.0
20	---	---	---	---	6.5	4.5	6.5	4.5	---	---	9.5	6.0
21	---	---	---	---	6.0	5.0	6.5	4.5	---	---	8.0	6.5
22	---	---	---	---	5.0	3.0	7.5	5.5	5.0	3.0	8.5	6.0
23	---	---	---	---	5.0	2.5	7.5	6.5	3.5	1.0	6.0	3.0
24	---	---	---	---	7.0	5.0	8.0	6.0	5.0	3.5	5.0	2.5
25	---	---	---	---	6.5	4.0	8.0	3.0	7.5	4.0	5.5	2.5
26	---	---	---	---	9.5	6.5	4.0	1.5	6.5	5.0	8.5	2.5
27	---	---	---	---	11.0	9.0	2.5	1.0	7.0	3.0	9.0	5.5
28	---	---	---	---	11.0	6.0	3.5	1.5	8.0	5.0	10.0	5.0
29	---	---	---	---	6.0	4.5	---	---	11.0	6.5	7.5	6.0
30	---	---	---	---	8.0	5.0	---	---	---	---	9.0	5.5
31	---	---	---	---	---	---	---	---	---	---	9.5	5.0
MONTH	---	---	---	---	---	---	8.0	1.0	---	---	13.5	1.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	5.5	19.0	15.0	18.0	13.0	25.0	18.0	25.0	21.0	25.0	20.0
2	7.5	5.0	18.5	15.5	21.5	15.5	23.5	20.0	24.0	21.0	24.5	20.5
3	11.0	4.5	18.5	15.0	23.5	17.5	22.0	20.0	24.5	21.5	23.0	19.0
4	11.5	8.0	17.0	13.5	25.0	19.5	22.0	18.0	24.5	21.0	22.0	17.5
5	13.5	6.5	18.0	11.0	24.5	18.0	21.0	17.5	24.5	18.5	20.5	17.0
6	16.5	9.0	20.0	14.0	22.0	19.0	21.0	15.5	23.0	18.5	22.0	16.5
7	13.5	2.5	20.0	15.5	23.5	16.0	21.0	16.5	23.5	20.0	22.5	17.5
8	4.0	1.5	19.0	15.5	24.0	17.0	22.0	17.5	22.5	19.0	22.0	19.0
9	8.5	2.5	15.5	12.0	23.5	19.0	22.5	19.5	21.0	18.0	21.5	18.0
10	11.0	6.0	14.5	10.5	21.0	16.5	23.0	19.5	21.5	16.0	21.0	16.0
11	14.0	10.0	17.0	11.5	21.0	13.5	26.5	20.5	23.0	17.0	21.5	18.0
12	17.0	11.5	19.0	13.0	21.5	15.0	28.0	22.5	23.5	20.0	21.5	20.0
13	17.0	15.5	17.0	14.5	20.5	18.5	27.0	22.5	25.5	20.5	24.5	20.0
14	---	---	16.5	14.5	25.0	18.0	31.5	22.5	25.5	20.0	24.0	21.5
15	---	---	17.0	15.5	24.0	21.5	31.5	29.5	26.0	22.5	22.0	17.5
16	---	---	16.5	14.5	24.5	19.0	30.0	28.5	24.5	19.5	22.0	18.0
17	15.5	14.0	18.0	14.5	23.0	17.5	30.0	22.0	24.5	21.0	24.0	19.5
18	17.5	12.0	19.5	14.5	24.5	18.0	26.5	21.0	22.0	20.5	23.5	21.0
19	15.5	14.5	20.5	15.5	26.5	20.0	26.5	22.5	22.0	20.5	22.5	20.0
20	15.0	12.5	19.0	17.0	24.5	20.5	28.0	22.5	24.0	19.5	21.5	17.5
21	12.5	10.5	22.5	16.5	21.0	18.0	28.5	24.0	24.5	19.5	22.0	17.0
22	12.5	10.5	22.0	17.5	17.5	15.0	27.0	24.5	23.0	20.0	22.0	18.0
23	15.0	11.5	23.5	17.5	15.0	13.0	29.5	23.5	23.5	20.0	20.0	16.0
24	13.0	12.0	23.5	18.0	14.5	13.0	28.0	24.0	23.5	20.5	19.0	18.0
25	14.0	10.0	24.0	18.5	18.5	14.5	26.0	22.5	24.5	20.5	21.0	18.0
26	15.0	9.0	23.0	18.5	20.0	16.5	25.0	20.5	25.5	21.5	20.5	19.0
27	15.5	9.5	22.0	17.0	22.0	17.5	23.0	21.0	23.5	21.0	19.5	17.5
28	16.0	10.0	21.5	17.0	23.0	18.5	24.0	20.0	24.0	19.5	17.5	16.5
29	16.0	11.5	22.0	17.0	22.0	19.5	22.5	19.0	24.5	19.5	18.0	17.0
30	19.5	13.5	20.0	18.5	20.5	18.5	23.5	18.5	24.5	19.0	17.5	13.0
31	---	---	18.5	15.0	---	---	25.0	19.5	24.5	19.0	---	---
MONTH	19.5	1.5	24.0	10.5	26.5	13.0	31.5	15.5	26.0	16.0	25.0	13.0

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OHIO

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, at gaging station on left bank, 500 ft downstream from Dillon Dam, 2.0 miles northwest of Dillon Falls, and 5.8 miles upstream from mouth.

DRAINAGE AREA.--742 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-72 (partial-record station).
Water temperatures: October 1961 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 23.0°C July 23-27; minimum, 1.5°C Jan. 22.

Period of record:
Water temperatures: Maximum, 27.0°C June 17-19, 1967; minimum, freezing point Feb. 7-12, 1967.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT., 1971 05...	1201	--	182	0	72	63	.4	2.7	12
NOV. 24...	1200	189	--	--	73	68	--	2.9	13
MAR., 1972 12...	--	1010	--	--	56	31	--	3.8	17
MAY 04...	1015	720	--	--	--	--	--	--	--
JUNE 22...	1040	184	--	--	63	44	--	2.0	8.8
AUG. 24...	1100	576	--	--	--	--	--	--	--

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971 05...	.22	.69	404	230	81	631	7.1	21.5
NOV. 24...	--	--	--	250	--	675	7.4	7.0
MAR., 1972 12...	--	--	--	200	--	460	7.5	5.5
MAY 04...	--	--	--	--	--	410	--	15.5
JUNE 22...	--	--	--	210	--	518	7.9	21.0
AUG. 24...	--	--	--	--	--	358	--	20.5

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.5	16.0	16.0	5.0	5.0	5.0	5.0	2.5	2.5	4.0	4.0
2	21.0	21.0	16.5	16.0	5.0	4.5	5.0	5.0	2.5	2.5	4.5	4.0
3	21.0	21.0	16.0	16.0	4.5	4.0	5.0	5.0	2.5	2.5	6.5	4.0
4	21.5	21.0	16.0	15.0	4.0	3.5	5.0	4.5	2.5	2.5	6.5	6.5
5	21.5	21.0	15.5	14.5	3.5	3.5	4.5	4.5	3.0	2.5	6.5	5.5
6	21.5	21.0	14.5	14.0	3.5	3.5	4.5	4.0	3.0	3.0	5.5	4.5
7	21.5	21.0	14.0	13.0	4.0	3.5	3.5	3.5	3.0	3.0	5.0	4.5
8	21.0	20.5	13.0	12.5	4.0	4.0	3.5	3.5	3.5	3.0	4.5	4.5
9	20.5	20.0	12.5	11.5	5.0	4.0	4.0	3.5	3.5	3.5	4.5	4.5
10	20.0	19.5	11.5	11.0	5.0	5.0	3.5	3.5	3.5	3.5	4.5	4.5
11	19.5	19.0	11.0	10.5	5.5	5.0	3.5	3.5	3.5	3.5	4.5	4.5
12	19.0	18.0	10.5	10.0	6.0	5.5	3.5	3.5	3.5	3.0	4.5	4.5
13	18.0	17.0	10.0	9.5	6.0	6.0	3.5	3.5	3.5	3.0	5.0	4.5
14	17.5	17.5	9.5	9.0	6.0	6.0	3.5	3.5	---	---	5.0	5.0
15	17.5	16.5	10.0	9.0	6.0	6.0	3.5	2.5	---	---	5.5	5.0
16	16.5	16.5	10.0	9.5	6.5	6.0	2.5	2.0	---	---	6.0	5.0
17	16.5	16.5	9.5	9.5	6.5	6.5	2.0	2.0	---	---	6.0	6.0
18	16.5	16.0	9.5	9.5	6.5	6.0	2.0	2.0	---	---	6.0	6.0
19	16.0	16.0	9.5	9.5	6.0	5.5	2.0	2.0	---	---	6.0	6.0
20	16.0	16.0	9.5	9.0	5.5	5.5	2.0	2.0	---	---	6.5	6.5
21	16.0	16.0	9.0	8.5	5.5	5.5	2.0	2.0	---	---	6.5	6.5
22	16.0	16.0	8.5	7.5	5.5	5.0	2.0	1.5	---	---	6.5	6.5
23	16.0	16.0	7.5	7.5	5.0	4.5	2.5	2.0	---	---	6.5	6.5
24	16.5	16.0	7.5	7.0	5.0	4.5	2.5	2.5	---	---	6.5	6.5
25	16.5	16.0	7.0	6.5	4.5	4.5	2.5	2.5	---	---	7.0	6.5
26	16.5	16.5	6.5	6.5	4.5	4.5	2.5	2.5	---	---	7.0	6.5
27	16.5	16.5	6.5	6.0	4.5	4.5	2.5	2.5	---	---	7.0	7.0
28	16.5	16.5	6.0	5.5	5.0	4.5	2.5	2.5	---	---	7.0	6.5
29	16.5	16.0	6.0	5.5	5.0	5.0	2.5	2.5	4.0	3.5	6.5	6.5
30	16.0	16.0	5.5	5.0	5.0	4.5	2.5	2.5	---	---	7.5	6.5
31	16.0	16.0	---	---	5.0	5.0	2.5	2.5	---	---	7.5	7.5
MONTH	21.5	16.0	16.5	5.0	6.5	3.5	5.0	1.5	---	---	7.5	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.5	14.5	13.5	19.0	18.5	17.0	16.5	22.5	22.0	20.5	20.5
2	7.5	7.5	14.5	14.5	19.0	18.5	17.0	17.0	22.0	21.5	21.0	20.5
3	7.5	7.5	15.5	14.5	18.5	18.5	18.0	17.0	21.5	21.5	20.5	20.5
4	7.5	7.5	15.5	15.0	19.0	18.5	17.0	17.0	22.0	21.5	21.0	20.5
5	8.5	7.5	15.5	15.0	19.0	18.5	18.0	17.0	22.0	21.5	21.0	20.5
6	9.0	8.5	15.0	15.0	18.5	18.5	17.5	17.5	22.0	21.0	20.5	20.5
7	9.0	9.0	15.0	15.0	19.0	18.5	17.5	17.0	21.0	20.5	20.5	20.0
8	9.0	8.5	15.0	15.0	19.0	19.0	17.5	17.0	21.0	20.5	20.0	19.5
9	8.5	7.0	15.5	15.0	19.5	19.0	17.0	17.0	21.0	20.5	20.0	20.0
10	7.0	6.5	15.5	14.5	19.5	19.0	18.0	17.0	21.0	20.5	20.0	19.5
11	7.0	6.0	14.5	13.5	19.5	19.0	18.5	18.0	20.5	20.5	19.5	19.5
12	7.5	6.5	13.5	12.5	19.5	19.0	18.5	17.5	20.0	19.5	20.0	19.0
13	10.5	7.0	12.5	12.0	19.5	19.0	18.5	18.0	20.0	19.5	20.0	20.0
14	12.0	10.5	13.0	12.0	19.5	19.0	19.0	18.5	19.5	19.0	20.0	20.0
15	13.5	12.0	15.0	13.0	20.0	19.0	19.5	19.0	19.5	19.0	20.0	20.0
16	13.5	12.5	15.0	14.5	20.5	20.0	20.0	19.5	19.5	19.5	20.0	20.0
17	15.0	13.5	15.5	15.0	20.5	20.5	21.0	20.0	20.0	19.5	20.0	20.0
18	15.0	14.5	15.5	15.0	21.0	20.5	21.5	21.0	21.5	19.5	20.5	20.0
19	15.0	14.5	15.5	15.0	20.5	20.5	21.5	21.0	21.5	21.0	20.5	20.0
20	15.0	14.5	16.5	15.5	21.0	20.5	22.0	21.5	21.0	20.5	20.5	20.0
21	15.0	14.5	16.5	16.0	21.0	20.5	22.5	22.0	21.0	20.5	20.0	20.0
22	14.5	14.0	16.5	16.0	21.5	20.5	22.5	22.0	20.5	20.0	20.5	20.0
23	14.5	14.0	16.5	16.0	21.0	19.0	23.0	22.0	20.5	20.0	20.5	20.0
24	14.5	14.0	17.0	16.0	19.0	17.5	23.0	22.5	21.0	20.5	20.0	19.5
25	14.5	14.0	17.5	17.0	18.5	17.5	23.0	22.5	21.0	20.5	19.5	19.5
26	14.0	13.5	17.5	16.5	17.5	16.5	23.0	22.5	20.5	20.0	20.0	19.5
27	14.0	13.5	17.0	16.5	16.5	16.0	23.0	22.5	20.5	20.0	20.0	20.0
28	13.5	13.5	18.0	17.0	16.0	15.5	22.5	22.5	20.0	20.0	20.0	20.0
29	13.5	13.0	18.5	18.0	16.0	15.5	22.5	22.5	20.5	20.0	20.0	19.5
30	14.0	13.0	18.5	18.0	16.5	16.0	22.5	22.5	21.5	20.5	19.5	18.5
31	---	---	19.0	18.5	---	---	22.5	22.0	20.5	20.0	---	---
MONTH	15.0	6.0	19.0	12.0	21.5	15.5	23.0	16.5	22.5	19.0	21.0	18.5
YEAR	23.0	1.5										

03149200 MUSKINGUM RIVER AT PHILO, OHIO

LOCATION.--Lat 39°51'51", long 81°54'22", Muskingum County, on diversion canal on right bank of Muskingum River, 2,000 ft downstream from canal headgates of Ohio Power Company Generating Division at Philo.

DRAINAGE AREA.--7,196 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1965 to September 1972.
Water temperatures: April 1965 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 2,070 micromhos Oct. 19, 20; minimum, 400 micromhos Feb. 29, Apr. 28-30.
Dissolved oxygen: Maximum, 15.0 mg/l on several days during October 1971, March and August 1972; minimum, 3.6 mg/l May 31.
Water temperatures: Maximum, 29.0°C July 24; minimum, 0.5°C Feb. 4, 5, 16.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)
OCT.							
04...	0705	144	0	180	230	.6	1.0
19...	1400	--	--	--	--	--	--
20...	0645	158	0	180	470	.8	1.1
NOV.							
03...	0655	172	0	160	440	.7	.40
29...	0705	154	0	190	200	.6	1.6
DEC.							
02...	0655	140	0	220	220	.6	1.3
09...	1230	116	0	170	95	.5	2.0
JAN.							
05...	0650	88	0	130	56	.3	3.0
24...	0700	104	0	170	140	.4	2.9
FEB.							
09...	0645	118	0	180	150	.4	1.5
22...	0705	80	0	120	77	.4	1.9
26...	0645	106	0	160	86	.3	1.9
MAR.							
08...	0650	70	0	120	160	.2	2.6
24...	0645	78	0	110	48	.2	2.5
APR.							
05...	0645	91	0	160	81	.3	2.2
17...	0655	62	0	110	28	.2	1.7
MAY							
15...	0705	103	0	110	44	.2	1.7
26...	0703	117	0	150	110	.3	1.4
JUNE							
01...	0755	123	0	150	130	.3	1.2
09...	1400	--	--	--	--	--	--
27...	1105	129	0	190	230	.4	1.8
JULY							
05...	0709	126	0	170	240	.4	1.7
21...	2225	121	0	78	50	.2	2.2
AUG.							
18...	0650	92	0	170	240	.4	6.2
25...	0700	124	0	120	90	.3	1.4
SEP.							
11...	0900	125	0	150	200	.4	1.3
20...	0650	125	0	110	86	.4	1.7

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum, 2,130 micromhos Oct. 19, 1970; minimum, 170 micromhos Apr. 28, 1965.
pH (1965-71): Maximum, 10.0 Jan. 1, 1969; minimum, 2.4 Sept. 24, 1971.
Dissolved oxygen (1965-67, 1970-72): Maximum, 15.0 mg/l on many days during 1966, 1967, 1970, 1971, and 1972; minimum, 1.9 mg/l Aug. 10, 11, 1971.
Water temperatures (1965-69, 1970-72): Maximum, 32.0°C July 26, 1969; minimum, freezing point on many days in 1967 to 1969.

REMARKS.--Continuous water-quality recorder operated since April 1965. Minimum recorded dissolved oxygen concentration of 1.5 mg/l occurred May 30, 1970. The recorder is located in the basement of the generating plant. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on a daily basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
04...	4.4	800	410	290	1310	--	--
19...	--	--	--	--	--	<.5	11
20...	4.8	1280	570	440	2090	--	--
NOV.							
03...	1.9	1170	500	360	1980	--	--
29...	7.1	762	420	290	1200	--	--
DEC.							
02...	5.9	800	430	320	1260	--	--
09...	8.8	540	300	200	821	--	--
JAN.							
05...	14	402	250	180	606	--	--
24...	13	666	360	270	961	--	--
FEB.							
09...	6.8	690	370	270	997	--	--
22...	8.5	432	230	160	639	--	--
26...	8.5	482	290	200	744	--	--
MAR.							
08...	11	566	310	250	899	--	--
24...	11	332	210	150	535	--	--
APR.							
05...	9.6	446	290	220	735	--	--
17...	7.4	254	180	130	427	--	--
MAY							
15...	7.5	310	220	140	542	--	--
26...	6.3	488	310	210	856	--	--
JUNE							
01...	5.4	508	300	200	828	--	--
09...	--	--	--	--	--	.6	5.0
27...	8.1	810	420	310	1290	--	--
JULY							
05...	7.6	816	410	310	1290	--	--
21...	9.6	306	210	110	524	--	--
AUG.							
18...	28	762	380	310	1250	--	--
25...	6.1	438	280	180	737	--	--
SEP.							
11...	5.6	676	370	270	1130	--	--
20...	7.3	418	260	160	705	--	--

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1760	1510	1720	1680	1270	1170	750	650	870	780	730	670
2	1680	1140	1860	1720	1280	1260	650	640	980	860	670	660
3	1260	1000	1950	1860	1330	1160	640	600	940	880	660	580
4	1430	1090	1970	1930	1160	1080	600	570	940	890	590	570
5	1510	1250	1930	1820	1130	1080	630	570	930	900	700	580
6	1490	1300	1870	1800	1190	1060	630	610	970	920	770	690
7	1510	1250	1900	1860	1180	920	630	520	1010	970	860	770
8	1520	1300	1900	1820	920	800	650	600	1020	1010	910	850
9	1530	1310	1900	1820	900	750	660	600	1010	960	850	780
10	1490	1310	1930	1890	900	800	690	640	1000	870	0	750
11	1420	1290	1940	1910	800	700	680	670	1000	930	750	720
12	1440	1230	1920	1890	700	600	710	680	930	870	720	700
13	1370	1190	1890	1830	770	680	790	710	980	860	870	710
14	1490	1240	1860	1800	800	770	800	800	960	790	880	840
15	1550	1340	1800	1750	850	790	800	800	790	700	850	680
16	1500	1440	1920	1800	850	750	800	800	700	680	700	680
17	1660	1420	1800	1610	750	690	810	800	690	600	660	620
18	---	---	1620	1590	750	700	810	790	600	550	620	610
19	2070	1780	1650	1610	760	710	790	590	620	570	620	590
20	2070	1610	1610	1530	710	690	830	590	600	550	650	620
21	1860	1540	1870	1550	760	690	920	810	660	560	660	640
22	1970	1560	1880	1400	780	760	910	870	650	510	720	620
23	1670	1590	1400	1290	810	760	1000	880	660	650	620	530
24	1590	1480	1330	1290	810	760	970	930	780	650	560	530
25	1570	1450	1290	1280	860	860	950	820	820	780	580	550
26	1730	1570	1280	1270	950	850	830	790	820	710	550	530
27	1760	1530	1270	1180	950	860	860	820	720	690	580	540
28	1720	1530	1190	1180	870	840	870	850	710	430	580	560
29	1730	1700	1300	1190	870	740	880	830	430	400	600	540
30	1750	1680	1320	1170	740	720	850	780	---	---	740	580
31	1730	1680	---	---	770	720	810	780	---	---	770	680
MONTH	2070	1000	1970	1170	1330	600	1000	520	1020	400	910	530

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	750	680	525	415	920	820	1010	920	1000	900	900	860
2	730	700	520	470	920	840	930	820	1020	900	930	880
3	730	700	590	520	1000	900	940	800	1090	950	890	810
4	715	700	610	565	1060	1000	1100	970	1220	1000	940	820
5	750	700	710	580	1170	1020	1330	690	1250	1110	920	880
6	750	740	700	590	1180	935	830	680	1170	1030	990	920
7	750	600	680	620	990	880	970	770	1100	1030	1030	990
8	600	490	730	640	1010	865	1010	810	1100	1060	1040	990
9	510	490	770	680	1010	860	840	760	1200	1140	1110	980
10	490	440	680	560	1030	900	830	730	1220	1160	1180	1090
11	450	440	575	530	945	870	805	725	1200	1070	1140	1080
12	505	450	580	540	950	890	820	720	1140	1060	1140	1080
13	500	460	600	510	1110	905	1030	770	1210	1120	1260	1120
14	460	440	540	500	1100	970	1080	740	1270	1080	1280	1240
15	470	440	580	520	1150	980	890	730	1260	1070	1250	1200
16	460	430	580	510	980	770	800	700	1260	1120	1360	1020
17	530	430	580	540	1000	875	810	630	1310	1160	1220	1040
18	550	460	610	580	1020	935	670	500	1380	910	1140	700
19	460	450	620	610	1140	970	750	440	910	630	700	660
20	460	450	630	600	1120	900	490	420	760	640	725	690
21	455	425	700	600	920	825	520	450	860	700	800	700
22	450	420	770	670	1000	900	570	465	830	680	940	800
23	445	425	780	730	1210	1000	690	550	840	700	1080	870
24	440	430	820	770	1210	1090	600	550	720	670	1140	860
25	430	420	880	790	1090	1040	640	580	710	680	900	840
26	430	430	870	800	1190	1050	790	680	680	600	920	830
27	435	420	970	840	1360	1230	840	750	700	600	1010	900
28	420	400	950	860	1340	1150	960	780	800	700	960	820
29	405	400	950	840	1150	1090	980	880	1150	880	870	720
30	415	400	960	850	1140	990	920	800	1130	970	1040	880
31	---	---	930	860	---	---	980	840	1060	880	---	---
MONTH	750	400	970	415	1360	770	1330	420	1380	600	1360	660
YEAR	2070	400										

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.0	6.6	6.5	7.2	6.7	7.4	7.0	8.2	7.7	6.8	6.7
2	7.9	6.9	6.6	6.4	7.5	6.9	7.5	7.1	8.0	7.7	6.7	6.4
3	7.6	6.9	6.7	6.4	7.5	7.0	7.3	7.0	7.9	7.6	6.7	6.3
4	7.3	6.9	6.7	6.6	7.6	7.0	7.5	7.0	7.9	7.5	6.8	6.5
5	7.0	6.7	6.7	6.6	7.7	7.1	7.2	6.5	8.1	7.2	6.9	6.6
6	7.0	6.6	6.9	6.7	7.7	7.0	7.1	6.4	8.2	7.9	6.9	6.6
7	7.0	6.6	6.9	6.7	7.0	6.5	7.5	6.9	8.0	7.1	6.8	6.5
8	7.0	6.6	6.8	6.6	7.1	6.4	7.5	7.0	7.8	6.9	6.8	6.4
9	7.0	6.7	6.8	6.7	7.2	7.0	7.5	7.1	7.8	7.0	7.1	6.5
10	6.9	6.6	6.9	6.3	7.6	7.1	7.6	7.0	8.0	7.5	7.1	6.8
11	6.8	6.6	6.9	6.6	7.4	6.9	7.2	6.9	8.3	7.7	7.0	6.7
12	7.2	6.6	6.8	6.6	7.2	6.8	7.5	7.0	8.2	7.7	7.0	6.8
13	7.1	6.7	7.0	6.8	7.2	6.8	7.6	7.3	8.2	7.7	6.8	6.6
14	6.9	6.7	7.0	6.9	7.2	6.9	7.5	7.0	7.9	6.6	6.6	6.5
15	7.1	6.5	7.2	7.0	7.2	7.0	7.5	7.4	6.9	6.4	6.7	6.5
16	7.0	6.7	7.4	7.2	7.2	7.0	7.6	6.8	7.2	6.5	7.4	7.2
17	7.1	6.7	7.6	7.4	7.3	7.1	8.1	6.9	7.1	6.8	---	---
18	---	---	7.5	7.4	7.2	6.7	7.8	7.2	7.0	6.5	---	---
19	6.9	6.4	7.5	7.3	7.0	6.6	7.7	6.8	7.1	6.5	---	---
20	6.9	6.7	7.5	7.4	7.4	6.8	7.6	6.8	7.1	6.6	---	---
21	6.7	6.5	7.6	7.4	7.5	6.9	7.8	7.2	7.1	6.8	---	---
22	6.5	6.4	7.6	7.4	7.4	6.9	7.9	7.6	7.0	6.4	---	---
23	6.6	6.3	7.5	7.2	7.5	7.0	7.8	7.1	7.0	6.6	---	---
24	6.6	6.5	7.6	7.2	7.6	7.0	7.6	7.5	7.0	6.8	---	---
25	6.5	6.4	7.6	7.2	7.3	7.0	7.6	7.2	7.0	6.8	---	---
26	6.4	6.1	7.6	7.1	7.3	7.0	7.7	7.2	7.0	6.7	---	---
27	6.5	6.1	7.6	7.2	7.2	7.0	7.9	7.7	6.8	6.6	---	---
28	6.5	5.5	7.5	7.1	7.1	6.9	8.0	7.6	7.0	6.8	---	---
29	6.4	5.8	7.5	7.2	7.1	6.8	8.2	7.6	6.8	6.7	---	---
30	6.3	5.9	7.5	6.8	7.2	6.9	8.0	7.6	---	---	---	---
31	6.5	6.3	---	---	7.0	6.5	8.3	7.4	---	---	---	---
MONTH	8.5	5.5	7.6	6.3	7.7	6.4	8.3	6.4	8.3	6.4	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	8.0	7.6	8.7	8.2	7.7	7.2
2	---	---	---	---	---	---	7.9	7.6	8.5	8.2	7.8	7.3
3	---	---	---	---	---	---	7.7	7.5	8.8	8.2	7.5	7.1
4	---	---	---	---	---	---	7.9	7.6	8.6	8.1	7.1	6.6
5	---	---	---	---	---	---	7.7	7.6	8.6	7.9	7.5	6.9
6	---	---	---	---	---	---	7.7	7.6	8.9	8.0	7.5	7.0
7	---	---	---	---	---	---	7.8	7.6	8.4	8.1	7.7	7.1
8	---	---	---	---	---	---	7.8	7.6	8.2	7.8	7.5	7.1
9	---	---	---	---	---	---	8.0	7.7	8.2	7.8	7.3	7.0
10	---	---	---	---	---	---	8.1	7.7	8.4	7.5	7.5	7.1
11	---	---	---	---	---	---	8.2	7.7	8.4	7.9	7.6	7.1
12	---	---	---	---	---	---	8.3	7.9	8.2	7.7	7.4	7.0
13	---	---	---	---	---	---	8.3	7.9	7.8	7.0	7.3	7.1
14	---	---	---	---	---	---	8.3	7.9	7.3	6.5	7.3	6.8
15	---	---	---	---	---	---	7.9	7.7	7.3	6.9	7.2	6.8
16	---	---	---	---	---	---	7.9	7.7	7.1	6.8	7.2	7.0
17	---	---	---	---	---	---	8.3	7.6	7.0	6.8	7.0	6.9
18	---	---	---	---	---	---	8.0	7.8	6.9	6.0	7.1	6.9
19	---	---	---	---	---	---	8.0	7.9	7.0	6.7	7.1	6.9
20	---	---	---	---	---	---	8.0	7.7	7.1	6.9	7.4	7.0
21	---	---	---	---	---	---	7.8	7.6	7.3	7.0	7.5	7.3
22	---	---	---	---	---	---	7.7	7.6	7.3	7.0	7.5	7.2
23	---	---	---	---	---	---	7.7	7.3	7.3	7.0	7.5	7.3
24	---	---	---	---	---	---	7.9	7.7	7.3	7.0	7.5	7.3
25	---	---	---	---	---	---	8.1	7.8	7.3	7.0	7.3	7.1
26	---	---	---	---	7.8	7.4	8.0	7.8	7.2	7.0	7.3	7.1
27	---	---	---	---	8.1	7.3	7.9	7.7	7.2	6.9	7.2	7.1
28	---	---	---	---	7.9	7.4	8.0	7.7	7.7	7.1	7.2	6.7
29	---	---	---	---	7.9	7.6	8.2	7.9	7.6	7.1	7.3	7.1
30	---	---	---	---	7.7	7.5	8.2	7.9	7.4	7.0	7.3	6.9
31	---	---	---	---	---	---	8.6	8.1	7.5	7.1	---	---
MONTH	---	---	---	---	---	---	8.6	7.3	8.9	6.0	7.8	6.6

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.8	5.2	11.8	10.7	13.4	12.6	10.5	9.4	12.9	12.4	12.8	11.8
2	6.0	5.7	10.7	10.3	13.5	13.1	10.9	9.3	12.9	12.5	13.0	12.7
3	6.0	5.8	10.4	9.8	14.4	13.1	10.7	10.1	12.5	11.6	12.7	12.5
4	6.0	5.9	10.1	9.7	14.8	13.8	10.3	10.0	11.6	11.6	12.6	11.7
5	6.1	5.9	10.9	9.9	14.2	13.6	10.4	10.1	11.7	11.6	11.8	11.5
6	6.1	5.8	11.5	10.8	14.2	13.2	11.1	10.6	11.7	11.2	13.0	11.8
7	6.0	5.5	11.4	10.7	13.2	12.1	12.9	10.6	11.9	11.3	13.6	12.5
8	5.9	5.5	12.0	11.1	12.5	12.0	11.0	10.9	11.9	11.9	13.3	13.2
9	6.0	5.9	12.3	11.8	12.0	11.2	12.5	10.5	12.2	11.9	13.7	13.2
10	9.5	5.7	12.5	12.0	10.8	10.5	11.0	9.8	12.3	11.9	13.7	13.4
11	9.3	5.8	12.9	12.3	10.6	10.4	10.0	9.2	12.2	12.0	13.4	13.3
12	7.9	6.5	12.5	12.4	11.0	10.5	9.4	9.0	12.2	11.7	13.4	13.1
13	---	---	12.4	12.1	10.8	10.5	8.9	8.6	11.8	11.3	13.4	12.9
14	10.4	7.0	12.1	11.7	10.9	10.7	8.7	7.8	11.3	9.6	12.9	12.7
15	10.5	7.8	11.9	11.1	10.7	10.6	8.6	8.0	10.5	9.6	12.5	12.4
16	9.8	7.5	11.3	11.0	10.0	9.9	9.0	8.4	10.9	9.6	12.4	11.2
17	10.0	7.1	11.1	9.8	10.8	10.7	11.3	9.2	10.5	10.1	13.6	12.0
18	---	---	10.6	10.1	10.7	10.2	12.5	11.2	10.7	10.2	13.7	12.9
19	11.7	5.6	10.2	9.6	11.4	10.6	12.2	12.2	10.7	10.1	14.5	13.1
20	6.1	5.8	9.8	9.3	12.0	11.5	12.2	11.6	11.8	10.7	15.0	14.4
21	12.2	5.9	13.8	9.4	11.5	11.4	11.8	9.0	11.8	11.2	14.5	13.6
22	11.1	5.6	11.8	10.7	12.1	11.6	12.3	11.9	11.6	10.5	15.0	13.7
23	10.9	9.7	12.6	11.8	11.9	11.5	11.9	10.5	12.4	11.6	15.0	14.2
24	10.3	9.6	13.3	12.5	11.5	11.1	11.4	10.7	12.9	12.1	15.0	15.0
25	9.7	8.8	13.4	13.2	11.3	10.9	11.4	11.2	13.1	12.6	15.0	15.0
26	9.8	8.6	13.8	13.2	11.2	10.2	11.4	10.6	12.7	12.0	15.0	15.0
27	10.4	9.2	13.6	13.1	10.2	9.3	12.0	10.8	12.6	12.0	15.0	15.0
28	10.7	9.3	15.0	13.0	9.7	9.2	12.9	11.8	12.4	12.2	14.9	14.3
29	10.0	9.4	14.2	12.7	10.0	9.3	12.6	12.2	12.4	11.8	11.5	11.2
30	11.0	9.2	13.1	12.5	10.7	8.1	12.2	11.8	---	---	11.7	11.4
31	12.1	10.9	---	---	10.1	9.6	12.6	11.9	---	---	11.4	10.9
MONTH	12.2	5.2	15.0	9.3	14.8	8.1	12.9	7.8	13.1	9.6	15.0	10.9

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.9	10.7	9.2	8.0	8.9	3.8	12.9	9.2	11.6	9.9	7.3	5.8
2	11.0	10.7	8.8	7.8	6.6	4.3	12.5	9.9	11.1	8.7	7.3	5.5
3	11.5	10.7	9.0	6.5	6.0	4.1	10.4	7.8	9.8	8.8	5.7	3.7
4	11.2	10.7	8.5	8.0	6.5	4.1	12.7	9.0	13.1	9.2	7.8	3.9
5	10.7	10.3	9.1	8.2	7.5	4.0	11.8	9.9	15.0	10.7	10.5	7.4
6	10.5	10.1	8.5	7.6	4.2	3.8	10.4	8.1	15.0	9.7	12.4	8.3
7	10.2	9.2	7.9	7.2	---	---	10.0	8.3	14.2	9.6	13.2	9.4
8	9.5	8.3	8.0	7.0	---	---	11.0	8.8	15.0	11.4	12.1	8.0
9	8.3	6.8	8.1	7.0	---	---	12.1	9.5	13.3	10.9	12.2	7.2
10	---	---	8.7	7.7	---	---	12.1	10.1	15.0	10.6	15.0	9.5
11	---	---	9.4	8.5	---	---	11.7	8.5	15.0	12.3	15.0	11.1
12	---	---	9.3	9.0	---	---	12.5	7.9	14.7	10.0	12.6	8.9
13	---	---	9.0	8.3	---	---	13.3	8.1	12.2	9.1	---	---
14	---	---	8.5	7.5	---	---	12.4	9.9	13.4	8.7	---	---
15	---	---	---	---	---	---	10.4	7.8	12.0	7.5	---	---
16	---	---	9.7	8.9	---	---	9.2	7.3	11.9	7.9	---	---
17	10.1	9.6	9.4	8.9	---	---	9.1	7.4	9.3	5.2	---	---
18	10.5	10.0	9.2	9.0	---	---	8.5	7.6	7.4	4.1	7.7	7.3
19	10.1	9.8	9.3	8.3	---	---	8.9	7.4	7.2	5.9	8.2	6.9
20	10.0	9.7	8.5	7.5	---	---	8.1	7.4	7.8	5.8	9.1	7.0
21	10.2	9.9	8.4	4.7	---	---	8.2	7.3	7.9	5.8	9.4	7.2
22	9.9	9.0	8.0	4.5	---	---	8.5	7.3	7.6	5.8	9.1	7.4
23	9.6	8.2	8.0	6.5	---	---	8.5	7.2	7.5	5.4	8.9	7.5
24	10.2	8.4	7.9	5.0	---	---	8.8	7.0	7.6	5.2	8.4	7.2
25	10.2	10.1	5.1	4.7	---	---	9.7	6.8	6.8	4.9	7.6	6.6
26	10.2	10.0	8.5	4.4	13.4	12.0	9.7	7.0	6.3	4.7	7.5	7.0
27	10.2	9.9	5.0	4.3	13.3	11.1	9.3	6.8	6.2	4.3	7.3	6.6
28	10.1	9.9	4.8	4.0	13.0	10.8	10.3	6.9	9.3	4.9	7.9	7.0
29	9.9	9.7	4.4	3.9	12.2	10.1	10.7	8.1	8.7	5.5	7.9	7.3
30	9.8	8.8	4.1	3.8	11.2	9.1	10.5	8.2	7.2	5.4	7.6	7.0
31	---	---	8.0	3.6	---	---	13.4	9.8	7.3	5.4	---	---
MONTH	---	---	9.7	3.6	---	---	13.4	6.8	15.0	4.1	15.0	3.7
YEAR	15.0	3.6										

03149200 MUSKINGUM RIVER AT PHILO, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	23.0	19.0	18.5	7.5	6.5	4.5	3.5	1.5	1.0	8.0	6.0
2	24.5	23.5	19.0	19.0	6.5	5.0	4.5	3.5	2.5	1.5	8.5	7.5
3	24.5	24.0	19.0	18.0	5.0	4.0	4.0	4.0	3.0	2.5	7.5	6.0
4	24.5	24.0	18.0	16.0	4.0	3.5	4.5	4.5	2.0	0.5	6.0	4.5
5	24.5	23.5	16.0	15.5	4.5	4.0	5.0	4.5	0.5	0.5	4.5	2.5
6	23.5	22.0	15.5	14.0	5.5	4.5	4.5	3.5	1.0	1.0	3.0	1.5
7	24.0	21.5	14.0	12.0	7.0	5.5	3.5	2.5	1.0	1.0	4.5	3.0
8	21.5	20.5	12.0	11.0	7.5	7.0	3.0	2.0	1.0	1.0	4.5	4.0
9	20.5	19.5	11.0	10.0	7.5	6.5	3.0	2.5	1.0	1.0	4.0	3.5
10	19.5	18.0	10.0	9.0	10.0	7.5	4.5	3.0	1.0	1.0	4.0	3.5
11	18.0	17.5	9.5	9.0	10.0	9.0	4.5	4.0	1.0	1.0	4.5	2.0
12	17.5	16.5	9.0	8.5	9.0	8.5	4.5	3.5	2.5	1.0	6.0	4.0
13	23.0	16.0	9.5	9.0	8.5	7.5	5.0	3.0	3.0	2.0	7.5	6.0
14	18.0	16.5	10.5	9.0	7.5	7.0	5.0	4.0	2.0	1.5	7.5	7.0
15	17.5	16.5	11.5	10.0	9.0	7.0	4.0	1.5	2.0	1.5	7.0	6.5
16	18.0	17.0	12.0	11.0	10.5	9.0	1.5	1.5	2.0	0.5	6.5	6.0
17	20.0	17.5	12.0	11.5	11.0	8.5	1.5	1.5	2.5	2.0	6.0	5.5
18	---	---	12.5	11.5	8.5	7.0	1.0	1.0	3.0	2.5	6.0	5.5
19	20.0	18.0	13.0	12.5	7.0	5.5	1.5	1.0	2.5	2.0	5.5	5.0
20	20.0	18.0	12.5	11.5	6.0	5.5	2.5	1.5	2.0	1.0	6.0	5.0
21	21.0	18.0	11.5	10.0	6.0	5.5	2.5	2.0	2.5	1.0	---	---
22	19.5	19.0	10.0	8.0	6.0	5.0	4.5	2.5	3.5	1.5	7.0	6.5
23	19.5	19.5	8.0	6.5	5.0	4.5	6.0	4.5	2.0	1.5	6.5	5.0
24	19.5	19.0	8.5	7.5	5.5	4.5	6.0	5.5	1.5	1.0	6.0	5.5
25	19.5	19.0	7.5	6.5	5.5	5.0	6.5	4.5	3.0	1.5	5.5	5.0
26	19.0	19.0	6.5	6.0	7.0	5.5	4.5	3.5	4.0	3.0	5.5	4.0
27	19.0	18.0	6.5	6.0	8.0	6.5	3.5	3.5	4.5	4.0	6.0	5.5
28	19.0	18.5	7.0	6.5	8.0	6.5	3.5	3.0	4.0	4.0	7.0	6.0
29	19.0	18.0	6.5	6.5	7.5	6.0	3.0	2.0	6.0	4.5	7.0	6.0
30	19.0	18.0	6.5	6.0	7.0	5.0	2.0	1.0	---	---	8.5	8.0
31	19.0	18.0	---	---	7.5	4.5	1.0	1.0	---	---	9.0	8.0
MONTH	24.5	16.0	19.0	6.0	11.0	3.5	6.5	1.0	6.0	0.5	9.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	16.0	14.5	20.0	18.5	23.5	21.5	26.0	25.0	25.0	24.0
2	8.5	8.0	16.5	16.0	20.0	19.5	23.5	22.5	25.0	24.5	25.5	24.5
3	9.0	7.5	17.5	16.0	21.5	20.0	23.5	22.5	25.5	24.5	25.0	24.0
4	10.0	9.0	17.0	16.0	22.5	21.0	23.5	22.5	25.5	24.5	24.0	23.5
5	10.5	8.5	16.5	15.5	23.0	22.0	23.5	21.5	25.5	24.0	23.5	23.0
6	10.5	8.5	17.0	15.5	23.0	23.0	21.0	19.5	25.0	24.0	23.0	22.0
7	10.5	7.0	18.0	17.0	23.0	22.0	21.0	19.5	24.5	24.0	23.5	22.0
8	7.0	5.5	18.0	17.5	23.0	22.0	21.0	20.0	24.5	24.0	23.0	22.0
9	7.0	5.0	18.0	16.0	23.0	22.0	22.0	20.5	24.0	23.0	23.0	22.0
10	8.5	7.0	16.0	15.0	22.0	21.0	22.5	21.5	23.5	22.0	23.0	21.0
11	10.0	8.5	15.0	14.0	21.5	20.0	23.5	22.0	24.0	22.0	23.0	21.5
12	12.5	9.0	16.0	14.5	21.5	20.0	25.5	24.0	23.5	22.5	23.5	22.0
13	15.5	12.5	16.5	15.0	21.0	20.5	26.5	25.0	24.0	23.5	24.5	22.0
14	15.5	14.5	17.0	16.0	22.5	21.0	26.5	26.0	25.0	23.5	24.5	23.0
15	15.0	14.5	19.5	16.5	23.0	22.5	26.5	25.5	25.5	24.0	24.0	20.5
16	15.5	15.0	18.5	17.0	23.0	22.5	25.5	25.0	26.0	24.5	24.0	20.5
17	15.0	14.0	17.5	17.0	23.0	22.5	25.5	24.5	26.5	25.5	25.0	22.5
18	15.5	14.5	18.5	17.0	23.0	22.0	24.5	23.0	25.5	24.5	24.0	22.0
19	15.5	15.0	18.5	17.0	24.0	22.5	24.5	23.0	24.5	23.5	23.0	22.0
20	15.5	15.0	19.5	19.0	25.0	24.0	25.5	24.0	24.0	23.0	23.0	22.0
21	15.0	13.0	20.5	19.0	25.0	24.0	26.0	25.0	24.5	23.0	22.0	21.5
22	13.0	12.5	21.0	20.0	26.0	25.5	26.5	26.0	24.5	24.0	22.0	21.5
23	13.5	12.5	22.0	21.0	25.5	24.5	28.5	27.0	24.5	24.0	21.5	21.0
24	13.5	12.5	22.5	21.0	22.5	21.0	29.0	28.0	24.5	24.0	21.0	21.0
25	13.0	12.5	23.0	22.0	20.0	18.5	28.0	27.0	24.5	24.0	21.0	20.5
26	13.0	12.5	23.0	22.0	18.5	16.5	27.0	25.5	25.5	24.5	21.0	21.0
27	13.0	12.5	23.0	22.0	20.5	19.5	26.0	25.5	25.0	25.0	21.0	21.0
28	13.0	12.5	22.5	21.5	21.5	20.0	25.5	24.5	25.0	24.5	21.0	20.5
29	13.5	12.5	22.5	21.5	21.5	21.0	24.5	24.0	25.0	24.0	20.5	20.0
30	15.0	13.5	22.0	21.5	22.0	21.5	25.0	24.5	24.5	24.0	20.0	18.0
31	---	---	21.5	20.0	---	---	26.5	25.5	25.0	24.0	---	---
MONTH	15.5	5.0	23.0	14.0	26.0	16.5	29.0	19.5	26.5	22.0	25.5	18.0
YEAR	29.0	0.5										

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03150000 MUSKINGUM RIVER AT McCONNELSVILLE, OHIO

LOCATION.--Lat 39°38'42", long 89°51'00", in SE 1/4 sec.11, T.10 N., R.12 W., Morgan County, at gaging station on left bank just upstream from Dam 7, at McConnelsville, and 3.5 miles downstream from Oilspring Run.

DRAINAGE AREA.--7,422 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1950-72 (partial-record station).
Water temperatures: October 1950 to September 1951, July 1954 to September 1963, June to September 1965.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.										
19...	1130	--	--	--	--	--	--	--	--	--
NOV.										
29...	1515	2480	--	--	--	--	--	--	--	--
JAN.										
24...	1100	5380	--	--	140	160	--	2.4	11	--
MAR.										
15...	1390	17900	--	--	110	140	--	2.6	12	--
JUNE										
09...	1430	--	--	--	--	--	--	--	--	--
30...	1315	3750	--	--	180	190	--	1.5	6.6	--
SEP.										
25...	1145	2700	134	0	130	160	.4	1.6	7.0	.040

DATE	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.										
19...	--	--	--	--	--	--	--	0	<.5	6.0
NOV.										
29...	--	--	--	--	1290	--	5.0	--	--	--
JAN.										
24...	--	--	340	--	968	8.0	5.0	--	--	--
MAR.										
15...	--	--	280	--	823	7.8	9.0	--	--	--
JUNE										
09...	--	--	--	--	--	--	--	--	<.5	9.0
30...	--	--	390	--	1130	7.3	18.0	--	--	--
SEP.										
25...	.12	576	330	220	941	7.5	21.0	--	--	--

03159510 HOCKING RIVER BELOW ATHENS, OHIO

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, at Harmony Lane Bridge, 5.5 miles downstream from gaging station at Athens.

DRAINAGE.--957 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1966 to September 1972.
Water temperatures: May 1966 to September 1972.

EXTREMES.--Period of record:
Specific conductance (1966-67, 1968-69): Maximum, 1,500 micromhos or greater July 12, 1966, Oct. 3, 1968; minimum, 140 micromhos July 13, 1966, Mar. 5, 1967.
Dissolved oxygen (1968-69): Maximum, 13.7 mg/l Feb. 19, 1969; minimum, 2.6 mg/l Jan. 27, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT.									
15...	1000	66	108	0	280	160	.3	1.2	5.4
26...	1345	--	--	--	--	--	--	--	--
31...	1100	60	118	0	320	160	.4	1.3	5.9
NOV.									
09...	0800	66	98	0	350	150	.3	1.0	4.6
28...	1700	100	108	0	320	120	.3	1.7	7.6
DEC.									
03...	1205	166	54	0	330	99	.3	1.7	7.3
08...	1405	1840	38	0	140	68	.2	1.4	6.3
JAN.									
05...	1250	1470	56	0	140	66	.2	1.2	5.1
18...	1800	359	76	0	220	120	.3	1.1	5.0
FEB.									
07...	0900	480	60	0	200	100	.2	1.4	6.1
14...	0900	3680	26	0	110	44	.2	1.3	5.6
MAR.									
12...	1200	1030	58	0	150	54	.2	1.4	6.1
20...	1800	1560	56	0	120	42	.2	1.9	8.3
APR.									
03...	0900	766	70	0	160	60	.2	1.2	5.5
24...	0900	4660	46	0	99	25	.1	1.2	5.2
MAY									
11...	1245	1980	64	0	110	32	.2	2.1	9.4
29...	1900	353	102	0	220	63	.2	1.1	4.8
JUNE									
08...	1200	260	102	0	260	75	.3	1.3	5.6
08...	1320	--	--	--	--	--	--	--	--
18...	2000	485	72	0	170	58	.2	2.9	13
JULY									
04...	1000	335	86	0	180	43	.2	1.5	6.8
31...	1000	120	131	0	260	83	.3	.90	4.2
AUG.									
14...	0900	281	105	0	270	87	.3	1.2	5.4
21...	0900	812	46	0	170	47	.2	1.3	5.6
SEP.									
04...	1000	918	23	0	160	26	.1	1.0	4.2
08...	1240	236	16	0	320	86	.3	1.4	6.4

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

EXTREMES.--Period of record--Continued
Water temperatures (1966-69): Maximum, 32.0°C Aug. 5, 30, 1969; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since May 1966. Maximum recorded dissolved oxygen concentration of 13.9 mg/l occurred Dec. 27, 1966 and Jan. 24, 1972. Minimum recorded dissolved oxygen concentration of 0.4 mg/l occurred June 9, 1966. Interruptions in the record were due to malfunctions of the instrument. Tabular data omitted for those periods when no data were recorded. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Hocking River at Athens, Ohio (station 03159500, drainage area 943 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
15...	702	370	280	1090	7.1	--	--	--
26...	--	--	--	--	--	0	<.5	4.0
31...	808	420	320	1240	7.2	--	--	--
NOV.								
09...	882	450	370	1290	7.5	--	--	--
28...	782	430	340	1140	7.9	--	--	--
DEC.								
03...	746	380	340	1050	7.4	--	--	--
08...	412	210	180	600	7.3	--	--	--
JAN.								
05...	380	220	170	614	7.5	--	--	--
18...	580	340	280	904	7.4	--	--	--
FEB.								
07...	580	300	250	834	7.3	--	--	--
14...	280	150	130	424	7.2	--	--	--
MAR.								
12...	384	220	170	587	7.5	--	--	--
20...	314	180	130	485	7.6	--	--	--
APR.								
03...	414	270	210	639	7.8	--	--	--
24...	240	160	120	374	6.9	--	--	--
MAY								
11...	300	180	130	461	7.8	--	--	--
29...	544	330	250	793	7.3	--	--	--
JUNE								
08...	608	390	310	909	7.2	--	--	--
08...	--	--	--	--	--	--	<.5	3.0
18...	444	290	230	669	6.9	--	--	--
JULY								
04...	436	250	180	645	8.1	--	--	--
31...	634	360	250	944	7.3	--	--	--
AUG.								
14...	642	350	260	952	7.3	--	--	--
21...	380	230	190	584	7.2	--	--	--
SEP.								
04...	324	180	160	477	7.5	--	--	--
08...	654	350	340	926	7.3	--	--	--

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	1230	1000	---	---	923	771	---	---	---	---
2	---	---	1240	1030	---	---	771	567	---	---	---	---
3	---	---	1240	1180	1060	1030	709	609	---	---	---	---
4	---	---	1280	1190	1110	1030	801	713	---	---	---	---
5	---	---	1250	1190	1080	1020	737	695	---	---	---	---
6	---	---	1250	1170	1090	880	710	533	---	---	---	---
7	---	---	1230	1200	714	434	665	603	---	---	---	---
8	---	---	1260	1220	604	349	683	621	---	---	---	---
9	---	---	1360	1240	731	666	675	632	---	---	---	---
10	---	---	1340	1220	728	654	670	551	---	---	---	---
11	---	---	1310	1200	758	716	666	591	---	---	---	---
12	---	---	1280	1220	785	674	686	642	---	---	---	---
13	---	---	1280	1210	758	669	689	645	---	---	---	---
14	---	---	1250	1180	791	719	720	635	485	434	---	---
15	1300	1090	1260	1200	797	567	738	683	468	429	---	---
16	1290	1190	1240	1170	783	725	---	---	449	420	---	---
17	1250	1170	1240	1190	860	756	---	---	476	423	---	---
18	1240	1100	1260	1170	820	822	---	---	494	450	---	---
19	1300	1170	1240	1130	---	---	---	---	522	420	---	---
20	1290	1230	1260	1140	---	---	---	---	539	491	---	---
21	1310	1250	1260	1210	---	---	---	---	574	501	---	---
22	1320	1220	1240	1190	890	855	---	---	587	543	---	---
23	1260	1220	---	---	930	878	---	---	618	341	---	---
24	1290	1200	---	---	920	805	762	720	599	377	---	---
25	1210	1140	---	---	890	818	---	---	552	459	---	---
26	1240	1180	---	---	896	819	---	---	554	426	---	---
27	1230	1180	---	---	930	872	---	---	551	474	---	---
28	1240	1180	---	---	933	880	---	---	540	527	---	---
29	1250	1210	---	---	935	884	---	---	---	---	---	---
30	1270	1200	---	---	965	883	---	---	---	---	---	---
31	1250	1190	---	---	921	870	---	---	---	---	---	---
MONTH	---	---	---	---	1110	349	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	676	625	832	754	782	566	1020	945	896	849
2	---	---	687	661	814	766	769	672	1020	951	891	860
3	---	---	677	651	822	768	758	562	1050	960	913	611
4	---	---	718	659	867	772	767	610	1030	909	909	391
5	---	---	701	663	932	628	862	729	1090	911	861	648
6	---	---	723	681	963	689	855	777	1090	919	905	728
7	---	---	747	690	950	692	873	610	962	890	953	824
8	---	---	771	725	1010	959	869	662	1000	878	933	882
9	---	---	725	569	1040	944	855	836	887	863	882	835
10	---	---	588	402	964	906	885	842	962	871	882	832
11	---	---	519	393	939	766	910	825	975	919	893	841
12	---	---	561	496	786	387	882	821	973	828	900	860
13	---	---	588	532	567	455	893	831	972	930	920	864
14	---	---	586	568	725	575	867	763	968	936	1003	571
15	---	---	616	529	827	725	896	776	964	898	571	474
16	---	---	566	475	861	718	861	690	894	793	613	537
17	---	---	535	488	863	711	863	580	838	691	646	508
18	---	---	535	496	777	576	653	537	768	567	648	606
19	667	381	---	---	755	660	769	613	913	521	696	549
20	574	667	---	---	743	717	858	722	834	539	729	600
21	519	492	---	---	808	721	866	809	611	567	778	712
22	473	329	---	---	829	759	911	862	809	575	762	747
23	366	335	---	---	879	611	961	925	819	471	791	756
24	367	364	738	717	925	829	907	823	697	611	787	732
25	438	366	766	713	925	660	977	862	769	713	763	733
26	636	623	757	720	934	859	876	826	736	713	831	772
27	567	656	766	756	934	885	881	863	756	723	841	767
28	663	555	827	756	929	875	880	832	777	755	856	767
29	656	587	834	766	919	888	887	832	---	---	839	635
30	636	628	839	802	932	939	1010	838	860	801	831	586
31	---	---	848	798	---	---	1010	865	866	833	---	---
MONTH	---	---	848	393	1040	387	1010	537	1090	521	1003	391

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

PH (UNITS), APRIL 1972 TO SEPTEMBER 1972

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.3	7.0	7.0	6.3	7.1	6.0	7.8	6.0	7.8	7.6
2	---	---	7.2	6.7	6.9	6.7	7.1	6.9	7.1	6.1	7.8	7.7
3	---	---	6.8	6.7	6.8	6.4	7.0	6.8	6.4	6.0	7.8	7.4
4	---	---	6.7	6.6	7.2	6.6	7.1	6.9	7.6	6.3	7.2	6.3
5	---	---	6.8	6.5	7.5	6.7	7.1	6.9	7.9	6.8	7.4	6.0
6	---	---	6.8	6.5	7.2	6.9	7.4	6.9	8.2	7.0	7.4	6.0
7	---	---	6.8	6.5	7.3	6.8	7.4	6.9	8.2	7.6	7.2	6.9
8	---	---	6.7	6.6	7.4	6.8	7.3	6.9	8.1	7.2	6.7	6.5
9	---	---	6.7	6.3	7.2	6.9	7.4	7.1	7.9	7.1	7.1	6.7
10	---	---	6.5	6.3	7.2	6.8	7.4	7.2	6.9	6.4	7.3	7.1
11	---	---	6.8	6.3	7.4	6.3	7.2	7.0	6.6	6.3	7.3	7.1
12	---	---	7.0	6.6	7.2	6.6	7.2	6.8	6.5	6.3	7.3	7.3
13	---	---	7.0	6.8	7.0	6.7	7.3	7.0	6.6	6.4	7.3	6.6
14	---	---	7.0	6.9	6.9	6.7	7.3	6.8	6.4	6.1	7.0	5.0
15	---	---	7.0	6.9	6.9	6.5	6.9	6.7	6.4	6.1	7.2	6.9
16	---	---	7.0	6.9	7.0	6.7	7.0	6.3	6.4	6.0	7.3	7.1
17	---	---	7.1	6.8	7.0	6.3	6.2	6.0	6.2	6.0	7.5	7.2
18	---	---	7.2	6.9	7.1	6.9	6.6	6.0	6.4	6.0	7.5	7.3
19	7.1	7.1	---	---	7.2	6.9	6.9	6.5	6.4	6.0	7.6	7.4
20	7.1	7.0	---	---	7.2	7.0	---	---	6.4	6.1	7.7	7.4
21	7.1	7.0	---	---	7.2	7.0	---	---	6.4	6.1	7.6	7.4
22	7.1	6.8	---	---	7.1	6.9	---	---	6.5	6.1	7.6	7.5
23	7.0	6.8	---	---	7.0	6.8	---	---	6.6	6.3	7.6	7.5
24	6.9	6.8	7.3	7.1	7.0	6.9	---	---	6.5	6.2	7.6	7.4
25	7.0	6.9	7.1	6.8	7.1	6.8	7.5	7.4	6.4	6.2	7.7	7.4
26	7.1	6.9	7.0	6.6	7.1	7.0	7.5	7.4	6.4	6.2	7.7	7.0
27	7.1	6.9	7.2	6.5	7.1	7.0	7.6	7.5	6.3	6.1	7.1	7.0
28	7.1	6.9	7.2	6.6	7.0	6.9	7.6	7.4	6.3	6.1	7.2	6.9
29	7.1	6.9	7.2	6.7	7.1	7.0	7.7	7.4	---	---	7.2	6.7
30	7.2	7.0	7.1	6.8	7.0	6.1	7.8	7.5	7.7	7.5	7.0	6.8
31	---	---	6.8	6.5	---	---	7.9	7.5	7.8	7.6	---	---
MONTH	---	---	7.3	6.3	7.5	6.1	7.9	6.0	8.2	6.0	7.8	5.0

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.3	3.7	---	---	---	---	---	---	---	---
2	---	---	5.5	2.8	---	---	---	---	---	---	---	---
3	---	---	3.8	1.6	11.5	11.2	---	---	---	---	---	---
4	---	---	7.8	3.6	11.5	11.1	---	---	---	---	---	---
5	---	---	9.5	6.9	11.4	10.7	12.2	11.5	---	---	---	---
6	---	---	9.3	6.8	10.8	9.1	11.7	10.8	---	---	---	---
7	---	---	9.7	6.7	10.5	8.6	11.1	10.8	---	---	---	---
8	---	---	12.1	9.2	9.9	9.3	11.1	10.7	---	---	---	---
9	---	---	13.2	10.0	9.9	9.2	10.9	10.4	---	---	---	---
10	---	---	12.9	10.2	9.1	8.0	12.2	10.4	---	---	---	---
11	---	---	12.1	9.8	10.2	8.0	11.0	10.6	---	---	---	---
12	---	---	12.2	8.9	8.5	8.3	10.8	10.5	---	---	---	---
13	---	---	10.8	8.7	9.1	8.5	10.6	10.2	---	---	---	---
14	---	---	11.6	8.4	9.2	8.8	10.8	10.6	13.6	13.4	---	---
15	10.5	8.3	11.1	7.2	8.8	8.0	11.1	10.5	13.6	13.5	---	---
16	11.0	7.1	12.1	8.7	8.8	8.1	---	---	13.7	13.5	---	---
17	11.5	8.2	12.4	11.8	8.6	8.2	---	---	13.7	13.4	---	---
18	11.8	8.2	12.6	11.7	8.7	8.6	---	---	13.4	13.0	---	---
19	10.7	6.5	12.4	11.3	---	---	---	---	13.1	12.9	---	---
20	10.6	7.2	12.6	11.4	---	---	---	---	13.6	13.1	---	---
21	9.5	6.7	12.6	12.1	---	---	---	---	13.7	13.4	---	---
22	8.4	4.6	12.4	11.9	---	---	---	---	13.3	13.0	---	---
23	---	---	---	---	---	---	---	---	13.1	12.9	---	---
24	---	---	---	---	---	---	13.9	13.6	13.6	13.0	---	---
25	---	---	---	---	---	---	---	---	13.3	13.0	---	---
26	7.9	6.1	---	---	---	---	---	---	13.0	12.8	---	---
27	7.8	6.1	---	---	---	---	---	---	13.1	12.8	---	---
28	8.1	5.2	---	---	---	---	---	---	12.8	12.5	---	---
29	8.1	4.9	---	---	---	---	---	---	---	---	---	---
30	7.4	4.8	---	---	---	---	---	---	---	---	---	---
31	8.2	5.2	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	---	---	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	---	---
MONTH	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	19.5	18.0	---	---	6.0	4.5	---	---	---	---
2	---	---	19.5	18.5	---	---	6.0	5.0	---	---	---	---
3	---	---	18.5	15.5	2.0	1.5	5.5	4.0	---	---	---	---
4	---	---	15.5	11.5	3.0	2.0	5.0	3.5	---	---	---	---
5	---	---	12.0	11.0	4.5	3.0	4.5	4.0	---	---	---	---
6	---	---	12.5	10.0	6.0	4.0	4.0	2.5	---	---	---	---
7	---	---	11.5	8.0	8.5	5.0	2.5	1.5	---	---	---	---
8	---	---	8.0	6.0	9.0	8.5	2.5	0.5	---	---	---	---
9	---	---	7.0	6.0	9.0	8.5	3.0	1.0	---	---	---	---
10	---	---	7.5	6.0	11.0	9.0	4.5	2.5	---	---	---	---
11	---	---	8.0	6.5	11.0	9.0	5.5	4.0	---	---	---	---
12	---	---	8.5	6.5	9.5	8.5	6.0	4.5	---	---	---	---
13	---	---	9.0	7.5	9.0	7.0	6.5	4.5	---	---	---	---
14	---	---	10.5	8.5	7.5	6.0	5.0	4.0	1.5	0.5	---	---
15	17.5	17.0	11.5	9.5	9.5	6.5	4.0	1.5	2.5	1.0	---	---
16	18.0	16.0	13.0	11.0	9.0	7.0	---	---	2.5	2.5	---	---
17	18.5	17.0	12.0	10.5	8.5	6.0	---	---	3.0	2.5	---	---
18	19.5	17.5	11.5	10.0	6.5	5.5	---	---	3.5	2.5	---	---
19	19.0	17.0	13.0	11.0	---	---	---	---	3.5	3.0	---	---
20	18.5	17.0	12.0	8.0	---	---	---	---	3.0	2.0	---	---
21	19.5	17.5	8.0	6.0	---	---	---	---	2.5	1.5	---	---
22	19.5	18.5	6.0	4.0	4.5	3.0	---	---	4.5	2.5	---	---
23	19.5	18.5	---	---	4.5	2.5	---	---	3.0	2.5	---	---
24	19.0	18.0	---	---	4.5	3.5	7.5	5.5	2.5	2.0	---	---
25	18.0	17.5	---	---	4.5	3.5	---	---	4.0	2.5	---	---
26	17.5	17.0	---	---	6.5	4.5	---	---	4.5	3.5	---	---
27	18.0	16.5	---	---	8.5	6.5	---	---	5.0	4.0	---	---
28	18.0	16.5	---	---	9.0	6.5	---	---	5.0	4.5	---	---
29	18.0	17.0	---	---	7.0	5.0	---	---	---	---	---	---
30	17.5	16.5	---	---	8.5	6.5	---	---	---	---	---	---
31	18.5	17.0	---	---	8.5	4.5	---	---	---	---	---	---
MONTH	---	---	---	---	11.0	1.5	---	---	---	---	---	---

	PRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.0	14.5	23.5	19.5	25.0	18.5	26.5	24.5	25.5	24.0
2	---	---	18.0	16.0	25.0	19.0	24.0	20.5	26.0	24.0	26.0	24.0
3	---	---	19.0	16.0	27.0	21.0	23.0	21.0	26.0	24.5	25.0	22.0
4	---	---	17.0	15.5	26.0	22.5	23.0	20.0	26.0	23.5	22.0	19.5
5	---	---	18.0	14.0	28.0	22.5	22.5	19.5	27.0	22.5	22.5	19.0
6	---	---	19.0	13.5	27.0	22.0	23.0	15.5	26.0	21.0	22.5	18.0
7	---	---	19.0	15.0	25.0	20.5	23.0	18.0	25.5	23.5	23.0	18.5
8	---	---	17.5	16.5	24.5	19.5	23.0	18.5	24.5	22.5	23.5	20.0
9	---	---	16.5	14.0	24.5	21.0	24.0	20.5	24.0	22.5	22.0	20.5
10	---	---	14.5	13.0	23.5	20.0	25.0	21.0	22.5	21.5	22.5	19.5
11	---	---	15.0	12.5	22.0	16.5	27.0	22.0	24.0	22.5	22.0	20.5
12	---	---	17.5	13.0	22.0	16.5	28.5	22.5	25.0	22.5	23.0	21.0
13	---	---	16.5	14.0	21.5	18.0	28.5	23.5	25.5	22.5	24.5	20.5
14	---	---	18.0	15.0	25.0	19.0	28.5	25.0	27.0	24.0	22.0	21.0
15	---	---	17.5	16.0	24.5	20.5	28.5	24.5	27.0	23.5	23.5	20.0
16	---	---	17.5	16.0	25.5	21.5	25.5	24.0	25.0	23.5	24.0	19.5
17	---	---	17.5	15.0	24.0	21.0	24.5	22.5	27.0	20.5	24.0	20.5
18	---	---	19.5	15.0	25.0	21.0	26.5	21.5	26.5	23.0	24.0	21.5
19	15.0	14.5	---	---	27.0	21.0	29.0	22.5	23.5	22.5	24.0	22.0
20	15.0	13.5	---	---	26.5	21.5	29.0	24.5	24.5	22.0	24.0	20.5
21	13.5	12.0	---	---	22.5	21.0	30.0	26.5	21	22.0	23.0	20.0
22	13.0	11.0	---	---	20.5	17.5	30.5	26.0	25.5	22.5	23.5	21.0
23	12.5	11.5	---	---	17.5	15.0	30.0	26.0	27.0	22.5	21.0	19.0
24	12.5	12.0	26.5	22.5	15.0	14.5	30.0	26.5	27.0	22.0	21.5	20.5
25	12.5	11.0	26.5	20.5	17.5	14.5	30.0	26.0	26.0	23.5	22.0	20.0
26	13.5	10.5	26.0	21.0	21.0	19.5	27.5	26.0	26.0	24.5	22.5	20.0
27	13.5	10.5	26.5	21.5	22.0	18.0	28.0	26.0	28.0	24.5	22.0	20.5
28	15.5	11.0	26.5	21.0	23.0	19.5	27.0	24.5	28.0	23.5	21.0	19.5
29	15.5	12.5	27.5	22.0	23.5	20.0	25.0	22.5	---	---	20.5	19.5
30	14.5	13.0	27.0	23.5	21.0	19.5	24.0	23.0	25.5	23.5	19.5	17.0
31	---	---	26.0	21.0	---	---	24.0	23.0	25.5	23.5	---	---
MONTH	---	---	27.5	12.5	28.0	14.5	30.5	15.5	28.0	20.5	26.0	17.0

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°21'45", long 82°18'47", in NW 1/4 SW 1/4 sec. 11, T.11 N., R.16 W., Vinton County, at gaging station on right bank, 250 ft upstream from Big Four Hollow Creek, 150 ft downstream from Morgan Hollow Creek, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--0.98 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1970 to September 1972.
Water temperatures: January 1971 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 3,100 micromhos Oct. 21, 22; minimum, 147 micromhos Apr. 7.
pH: Maximum, 7.5 Dec. 6; minimum, 2.1 on several days during June and July.
Water temperatures: Maximum, 27.0°C July 18; minimum, freezing point on several days during November, December and February.

Period of record:
Specific conductance (1971-72): Maximum, 3,100 micromhos Oct. 21, 22. 1971; minimum, 147 micromhos Apr. 7, 1972.
pH (1971-72): Maximum, 7.5 Dec. 6, 1971; minimum, 2.1 on several days during 1971 and 1972.
Water temperatures: Maximum, 32.5°C Sept. 5, 8-10, 1971; minimum, freezing point on several days during winter periods.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since January 1971. Minimum recorded pH of 2.0 occurred on several days during April and May 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate bi-weekly basis and partial analyses were made on these samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.											
14...	1525	.05	83000	8300	1400	2130	1020	12	2490	2.9	15.0
29...	1130	.05	120000	12000	1800	2600	1100	16	2930	2.9	11.0
NOV.											
09...	1530	.03	96000	1100	1600	2300	660	13	2610	2.8	3.5
22...	1115	.04	120000	11000	1600	2450	1100	14	2790	2.8	1.5
DEC.											
07...	1430	6.0	6400	8400	140	216	120	.7	371	4.0	10.0
20...	1110	.33	18000	2500	340	530	250	2.1	905	3.2	5.0
JAN.											
10...	1215	1.8	6000	1100	180	276	140	1.0	474	3.8	6.5
19...	1145	.30	29000	2700	440	632	260	3.3	1130	3.2	3.5
FEB.											
03...	1530	1.9	14000	1200	220	350	170	1.3	675	3.5	.5
15...	1030	4.8	11000	1000	200	346	140	1.2	608	3.4	4.0
28...	1200	1.5	17000	1500	280	406	180	2.5	788	3.3	6.0
MAR.											
14...	1330	.60	17000	2000	310	470	210	2.7	848	3.3	6.0
28...	1130	1.0	18000	1400	280	456	210	2.5	813	3.2	6.5
APR.											
14...	1430	3.8	3500	670	140	238	100	1.0	391	3.7	13.5
24...	1400	2.6	6900	1400	190	282	160	1.6	548	3.4	12.5
MAY											
19...	1230	1.3	9800	1400	250	386	180	2.0	713	3.3	17.5
JUNE											
02...	1100	.20	46000	3500	630	1020	490	5.6	1560	3.0	13.0
19...	1505	.10	52000	5000	850	1310	550	7.6	1870	2.9	22.5
JULY											
05...	1115	.30	15000	3200	470	814	350	3.6	1260	3.0	15.0
19...	1150	.16	33000	4200	640	984	420	5.3	1590	2.9	20.5
AUG.											
01...	1100	.06	73000	8700	1300	1980	880	13	2380	2.8	18.5
01...	1300	--	73000	8700	--	--	--	--	--	--	--
21...	1445	.50	23000	2900	420	718	320	3.4	1140	3.1	21.5
SEP.											
07...	1130	.10	33000	5600	760	1200	500	6.5	1550	2.7	14.5
27...	1250	.31	32000	3500	480	704	290	3.6	1210	3.1	18.5

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2620	2570	3000	2800	2000	1650	1630	1570	---	---	925	829
2	2640	2580	2840	1780	2300	2000	---	---	---	---	904	841
3	2680	2630	2720	2420	2500	2300	---	---	---	590	841	669
4	2720	2660	2760	2710	2330	2240	---	---	928	636	705	629
5	2720	2670	2810	2500	2260	2150	---	---	1220	923	722	691
6	2750	2680	2820	2620	2150	407	---	---	1250	1040	812	672
7	2780	2710	2620	2340	964	350	---	---	1380	1240	800	501
8	2800	2730	---	---	1110	641	---	---	1510	1260	629	509
9	2800	2500	---	---	1260	1110	860	302	1350	1270	838	633
10	---	---	2730	2600	1580	1240	642	217	1410	1230	859	753
11	---	---	2760	2460	1450	1420	832	611	1270	1200	961	859
12	---	---	2790	2730	1540	1450	832	445	1260	1120	946	889
13	---	---	2830	2640	1630	1520	1090	531	1120	322	993	929
14	2750	2350	2870	2590	1690	1160	1280	901	542	359	991	861
15	2860	2750	2900	2610	1440	764	1590	1280	627	487	991	901
16	2880	2840	2910	2690	1260	844	1960	1590	684	513	1010	646
17	2930	2830	2930	2880	1450	1230	1860	1310	771	684	658	618
18	2990	2900	2960	2640	1400	1310	1310	1110	777	621	636	609
19	3040	2950	2980	2560	1440	1310	1250	1070	807	642	---	---
20	3050	3000	2810	2660	1220	891	1250	1120	845	693	896	825
21	3100	3050	2800	2750	1230	1100	1240	1100	905	808	918	805
22	3100	2870	2920	2800	1390	1230	1260	1010	983	747	745	430
23	2920	2690	2950	2830	1430	1370	1070	653	985	482	651	504
24	2690	2080	2830	2710	1420	1360	1090	627	501	381	679	655
25	2690	2520	2720	2610	1490	1410	840	450	---	---	677	657
26	---	---	2630	2600	1560	1490	1010	722	---	---	669	661
27	---	---	2630	1880	1670	1520	1090	984	---	---	850	656
28	---	---	2310	2150	1650	1400	---	---	815	763	879	792
29	2900	2850	2260	1380	1690	1570	---	---	843	765	884	824
30	2890	2860	1650	1340	1720	1590	---	---	---	---	904	769
31	2900	2790	---	---	1590	1490	---	---	---	---	966	860
MONTH	---	---	3000	1340	2500	350	---	---	1510	322	1010	430

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	932	801	1010	824	1620	1400	---	---	2500	2450	2250	2170
2	920	835	1040	977	1730	1540	1150	1050	2570	2490	2250	1260
3	1000	886	1090	997	1830	1650	1220	710	2520	2660	2010	520
4	890	373	1087	910	1880	1670	1270	970	2270	533	1460	1050
5	501	413	1040	885	1990	1790	1350	1170	2140	1570	1610	1460
6	---	---	1200	1020	1980	1790	1520	1340	2180	2110	1700	1550
7	197	147	1200	1150	2030	1820	1690	1520	2300	2110	1790	1700
8	219	197	1170	1030	2060	1940	1790	1680	2340	2230	1820	509
9	430	219	1060	498	2060	800	1860	760	2420	2340	1390	1140
10	530	430	498	276	1930	1170	1790	1540	2440	2320	1810	1390
11	621	528	631	440	2220	1860	2050	1790	2600	2440	1790	1630
12	710	607	773	598	2190	2050	2160	2010	2580	2470	1730	519
13	607	519	756	710	2120	1190	2170	2090	2540	2450	1280	829
14	567	400	756	474	1990	1620	2270	2150	2610	2510	1310	1230
15	514	460	599	236	2020	472	2320	620	2750	2610	1540	1220
16	567	247	368	246	1530	610	998	681	2820	2710	1570	1450
17	459	286	592	368	1870	1530	1420	945	2820	656	1590	1510
18	637	459	726	508	1970	1810	1610	1370	958	289	1720	1570
19	663	603	827	700	1970	1800	1700	1550	758	362	1750	1040
20	676	547	818	658	1970	866	1840	1700	1060	596	1900	1640
21	699	403	963	803	1600	1380	2020	1840	1350	1060	1880	1750
22	403	320	1000	963	1700	1560	2110	1940	1340	843	1770	1610
23	355	329	1170	956	1750	1490	2220	2100	1300	1210	1940	1520
24	600	330	1250	1110	1770	1590	2300	2210	1670	1300	1670	609
25	646	567	1290	1180	1690	1550	2300	2250	1650	1600	1440	930
26	616	615	1420	1260	2070	1650	2420	2300	1880	1700	1410	806
27	612	726	1570	1400	2140	2000	2440	2390	1890	1650	1350	1160
28	885	749	1590	1480	2290	2010	2410	2390	1990	1890	1620	1350
29	880	865	1620	1140	2070	2000	2470	2250	2090	1990	1610	565
30	870	842	1550	752	---	---	---	---	2190	2060	968	615
31	---	---	1610	1250	---	---	---	---	2250	2160	---	---
MONTH	1000	147	1620	236	2220	472	2470	620	2820	289	2250	509
YEAR	3100	147										

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.8	2.7	2.6	2.6	3.0	2.6	3.0	2.8	---	---	3.0	2.8
2	2.7	2.7	3.1	2.6	2.9	2.4	---	---	---	---	3.1	2.9
3	2.7	2.7	2.7	2.6	3.0	2.6	---	---	3.8	3.3	3.3	3.0
4	2.7	2.7	2.9	2.7	3.2	2.7	---	---	3.5	2.7	3.4	3.2
5	2.7	2.6	2.9	2.6	3.1	2.8	---	---	3.4	3.0	3.4	3.3
6	2.7	2.7	2.8	2.6	7.5	3.1	---	---	3.7	3.2	3.5	3.1
7	2.8	2.7	2.8	2.6	4.1	3.6	---	---	3.6	3.0	3.9	3.2
8	2.8	2.7	---	---	3.6	3.0	---	---	3.6	2.7	3.9	3.5
9	2.7	2.7	---	---	3.1	3.0	4.7	2.7	3.5	3.1	3.5	3.2
10	---	---	3.0	2.7	3.1	2.9	4.4	3.2	3.5	3.0	3.3	3.2
11	---	---	3.0	2.7	3.0	2.8	3.2	2.8	4.0	3.4	3.2	3.1
12	---	---	3.0	2.8	2.9	2.8	4.1	2.8	4.1	3.7	3.2	3.1
13	---	---	3.1	2.8	3.1	2.9	4.1	2.9	---	---	3.1	3.0
14	2.8	2.6	3.0	2.8	3.0	2.9	3.1	2.7	3.6	3.1	3.1	3.0
15	2.7	2.6	3.0	2.9	3.7	2.8	2.9	2.7	3.3	2.9	3.2	3.0
16	2.7	2.6	3.2	3.0	3.3	2.7	2.8	2.6	3.2	2.7	3.4	3.1
17	2.7	2.6	3.1	2.9	2.8	2.5	2.9	2.5	2.9	2.6	3.4	3.3
18	2.6	2.6	3.1	2.9	2.6	2.2	3.0	2.6	3.0	2.6	3.4	3.4
19	2.6	2.5	3.2	3.0	2.6	2.2	3.0	2.6	3.0	2.7	---	---
20	2.6	2.5	3.2	2.9	3.1	2.6	2.9	2.5	2.8	2.6	---	---
21	2.6	2.5	3.1	2.8	2.9	2.7	3.0	2.7	2.7	2.5	---	---
22	2.7	2.6	2.9	2.2	3.0	2.5	3.2	2.8	2.7	2.5	---	---
23	2.7	2.6	2.8	2.2	3.4	2.9	3.6	3.2	2.9	2.4	---	---
24	2.9	2.7	3.1	2.5	3.2	2.8	3.8	3.2	3.9	2.9	---	---
25	2.7	2.6	3.4	3.0	3.0	2.7	4.3	3.4	---	---	---	---
26	---	---	3.7	3.1	2.8	2.6	3.7	3.3	---	---	---	---
27	---	---	3.6	3.2	2.7	2.6	3.5	3.3	---	---	3.6	3.4
28	---	---	3.4	3.1	3.0	2.6	---	---	3.6	2.8	3.8	3.2
29	2.6	2.5	3.4	3.1	2.9	2.7	---	---	3.0	2.8	3.2	2.7
30	2.6	2.5	3.4	3.0	2.9	2.6	---	---	---	---	3.0	2.5
31	2.7	2.6	---	---	2.9	2.6	---	---	---	---	3.3	2.9
MONTH	---	---	3.7	2.2	7.5	2.2	---	---	4.1	2.4	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.8	2.5	---	---	2.9	2.1	---	---	2.7	2.5	2.8	2.7
2	2.7	2.5	2.7	2.4	2.8	2.5	---	---	2.7	2.6	3.2	2.7
3	2.8	2.5	2.7	2.6	---	---	---	---	2.9	2.6	5.1	2.8
4	3.4	2.5	2.9	2.6	---	---	---	---	6.3	2.7	3.4	3.0
5	3.2	2.7	2.8	2.7	2.3	2.2	2.9	2.7	3.0	2.7	3.0	2.8
6	---	---	2.8	2.6	2.3	2.1	2.7	2.6	2.8	2.7	3.0	2.8
7	3.2	2.7	2.8	2.6	2.4	2.2	2.7	2.6	2.8	2.7	3.0	2.5
8	3.2	3.0	2.8	2.7	2.4	2.1	2.7	2.5	2.7	2.6	5.2	2.5
9	3.1	3.0	3.3	2.7	3.1	2.1	3.9	2.6	2.7	2.6	2.9	2.7
10	3.0	2.8	4.2	3.3	2.9	2.1	2.9	2.7	2.6	2.5	2.7	2.5
11	3.0	2.8	3.4	3.0	2.7	2.1	2.9	2.7	2.6	2.5	2.5	2.5
12	2.9	2.7	3.1	2.9	2.7	2.3	2.7	2.6	2.6	2.5	5.9	2.5
13	3.1	2.9	3.0	2.9	2.8	2.2	2.8	2.7	2.6	2.6	3.3	2.7
14	3.2	2.6	3.4	2.9	2.5	2.2	2.7	2.6	2.6	2.5	2.7	2.6
15	2.7	2.5	4.3	3.0	5.2	2.4	6.1	2.6	2.6	2.5	2.8	2.5
16	3.8	2.5	4.4	3.5	5.5	2.7	6.3	3.0	2.6	2.5	2.6	2.5
17	3.3	2.9	3.5	3.3	2.7	2.5	3.8	2.9	6.0	2.5	2.6	2.5
18	3.0	2.6	3.4	2.9	2.7	2.5	2.9	2.7	6.2	2.9	2.6	2.5
19	3.0	2.8	3.2	2.8	2.6	2.5	2.9	2.8	6.1	3.4	3.0	2.5
20	3.1	2.9	3.1	2.8	3.3	2.5	2.8	2.7	3.9	3.1	2.5	2.4
21	3.3	2.9	3.0	2.6	2.6	2.6	2.8	2.7	3.1	3.0	2.5	2.4
22	3.4	3.3	2.9	2.6	2.6	2.5	2.7	2.6	4.2	3.0	2.4	2.3
23	3.4	3.3	2.7	2.5	2.5	2.4	2.7	2.6	3.1	2.9	2.6	2.3
24	3.4	3.2	2.7	2.5	2.4	2.3	2.7	2.6	2.9	2.8	5.2	2.5
25	3.3	3.1	2.7	2.4	2.3	2.2	2.7	2.6	2.9	2.8	3.1	2.6
26	3.3	3.1	2.5	2.3	---	---	2.7	2.6	2.8	2.8	3.3	2.5
27	3.5	3.2	2.5	2.2	---	---	2.7	2.6	2.8	2.8	2.8	2.6
28	3.5	3.3	2.6	2.2	---	---	2.6	2.6	2.9	2.8	2.7	2.6
29	3.5	3.3	2.6	2.2	---	---	2.6	2.1	2.8	2.7	5.7	2.6
30	3.5	3.4	3.3	2.3	---	---	---	---	2.8	2.7	6.0	3.2
31	---	---	2.7	2.4	---	---	---	---	2.8	2.7	---	---
MONTH	3.8	2.5	4.4	2.2	---	---	6.3	2.1	6.3	2.5	6.1	2.3
YEAR	7.5	2.1										

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	15.5	15.5	12.5	3.5	0.5	2.5	1.0	---	---	---	---
2	20.0	16.5	17.0	11.5	1.0	0.5	---	---	---	---	---	---
3	20.5	16.0	11.5	7.0	1.0	0.0	---	---	1.0	0.0	---	---
4	20.0	16.5	8.0	5.0	1.5	0.0	---	---	4.0	0.0	---	---
5	18.0	15.0	8.0	2.5	5.0	1.0	---	---	5.5	3.0	---	---
6	17.0	14.0	8.5	4.0	15.5	5.0	---	---	7.0	5.0	4.5	1.5
7	15.0	12.0	9.0	1.0	18.5	9.0	---	---	6.5	1.0	2.0	1.5
8	14.0	9.0	---	---	9.0	8.0	---	---	2.0	1.0	---	---
9	18.0	12.5	---	---	10.0	8.0	11.0	4.5	3.0	1.5	---	---
10	---	---	6.0	3.0	13.5	8.5	12.5	6.5	2.5	1.5	---	---
11	---	---	6.0	0.5	10.5	7.0	7.0	4.0	4.5	2.5	---	---
12	---	---	7.5	1.5	12.0	7.5	7.5	2.0	6.5	2.5	---	---
13	---	---	9.0	4.0	14.5	5.0	10.5	2.5	7.5	6.5	---	---
14	15.0	12.0	10.0	2.5	15.0	4.5	4.5	1.0	7.0	4.5	5.0	4.0
15	15.0	10.0	11.5	6.0	12.5	6.0	5.5	2.0	5.5	4.5	4.5	4.0
16	16.5	13.0	9.5	6.0	9.5	6.5	3.5	3.0	11.0	4.0	---	---
17	16.5	12.0	9.5	4.5	7.5	3.5	4.0	1.5	12.5	9.0	---	---
18	16.5	12.5	10.5	5.0	5.0	3.0	4.5	3.0	11.5	6.5	---	---
19	15.5	11.0	9.5	4.0	6.5	3.5	3.5	2.5	6.5	4.5	---	---
20	16.5	11.5	6.0	3.5	6.5	5.5	7.0	2.5	6.5	4.0	12.5	6.0
21	16.0	12.0	5.5	2.5	6.5	3.5	6.5	5.5	8.5	4.5	6.0	5.0
22	16.5	14.0	2.5	0.0	3.5	0.5	---	---	9.0	5.0	---	---
23	16.5	15.0	1.5	0.5	4.5	0.5	---	---	8.0	5.0	---	---
24	16.0	15.0	1.0	0.5	8.0	4.5	---	---	---	---	---	---
25	15.0	14.5	3.0	0.0	7.5	2.5	---	---	---	---	---	---
26	---	---	1.5	0.0	10.5	7.5	---	---	---	---	---	---
27	---	---	3.5	1.0	12.5	9.0	---	---	---	---	9.5	5.0
28	---	---	3.0	1.5	12.0	2.0	---	---	8.0	5.5	11.5	4.0
29	14.0	10.5	6.0	1.0	5.5	1.0	---	---	6.5	5.5	8.5	4.0
30	15.0	9.0	6.0	2.0	11.0	5.0	---	---	---	---	12.5	5.5
31	15.5	10.0	---	---	5.5	3.0	---	---	---	---	12.5	5.5
MONTH	---	---	17.0	0.0	18.5	0.0	---	---	12.5	0.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	6.0	---	---	18.5	10.5	---	---	21.0	18.5	21.0	15.0
2	13.0	8.0	18.0	17.0	23.0	12.0	21.0	18.5	21.0	16.5	21.0	15.5
3	16.0	8.5	---	---	24.0	13.5	21.5	17.0	24.0	18.0	17.5	16.5
4	18.0	14.5	14.0	10.0	24.5	14.5	19.5	15.5	21.5	17.5	20.5	15.0
5	15.5	14.0	19.0	7.5	23.5	13.0	21.0	15.0	23.0	14.5	19.0	13.5
6	---	---	24.0	10.5	19.0	14.5	19.5	12.0	20.5	14.0	19.5	12.0
7	12.0	7.0	23.5	15.5	22.5	12.5	20.0	12.0	21.5	17.0	20.0	12.5
8	16.0	12.0	---	---	22.5	11.5	21.5	13.5	20.5	15.5	19.5	14.5
9	20.0	13.0	---	---	21.5	14.5	22.0	15.0	19.0	16.5	23.0	16.5
10	18.0	9.0	18.0	10.0	20.0	13.5	21.0	16.0	18.0	13.5	22.5	15.0
11	17.0	9.0	23.5	10.0	20.0	9.0	25.5	16.5	20.0	12.5	23.5	16.5
12	---	---	22.5	14.0	21.0	9.5	25.5	17.0	20.0	15.5	20.0	17.5
13	---	---	---	---	18.5	15.0	22.5	17.0	20.5	15.5	23.5	17.0
14	12.0	9.0	---	---	25.0	15.0	24.5	17.5	21.5	15.5	21.5	17.0
15	14.0	8.5	23.5	16.5	22.0	16.5	23.5	18.0	20.5	17.5	21.0	15.0
16	19.5	12.5	---	---	24.5	17.5	22.0	19.0	20.5	15.0	21.5	14.0
17	18.5	10.0	---	---	21.0	14.5	25.0	18.5	22.5	17.0	21.5	15.5
18	19.0	7.5	19.5	13.5	23.5	15.0	27.0	18.0	23.0	17.5	21.5	17.0
19	17.0	9.5	19.5	11.0	25.0	15.5	26.5	18.5	20.0	16.5	21.0	17.0
20	19.0	15.5	18.0	13.0	19.5	16.5	26.5	18.5	23.0	16.0	19.5	14.0
21	---	---	22.5	13.0	18.5	15.5	26.5	19.5	23.0	15.0	19.5	13.0
22	---	---	23.0	13.0	15.0	13.5	26.0	19.5	22.0	16.0	17.5	15.0
23	---	---	24.5	13.5	13.5	12.0	26.5	19.0	24.0	17.5	18.5	12.5
24	13.5	9.0	23.5	11.5	14.0	12.5	24.5	19.0	23.5	17.0	18.5	16.5
25	16.5	7.5	25.0	0.0	17.5	13.0	24.5	18.5	24.0	17.5	21.0	16.5
26	18.0	5.5	24.0	14.0	21.5	12.0	22.5	16.5	22.5	17.5	20.5	16.0
27	18.5	12.0	23.0	11.0	21.5	14.5	23.0	16.0	20.0	17.0	19.0	16.5
28	---	---	22.5	11.0	21.5	14.5	21.5	18.5	21.0	16.5	19.0	16.0
29	---	---	22.5	12.0	18.5	15.0	19.0	17.0	21.5	15.0	19.0	16.0
30	---	---	18.0	14.5	---	---	---	---	20.5	14.5	17.5	13.0
31	---	---	19.5	11.5	---	---	---	---	21.0	14.5	---	---
MONTH	---	---	---	---	25.0	9.0	27.0	12.0	24.0	12.5	23.5	12.0
YEAR	27.0	0.0										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°21'48", long 82°18'51", in SE 1/4 NE 1/4 sec.11 T.11 N., R.16 W., Vinton County, at gaging station on right bank, 200 ft upstream from State Route 278 crossing, 300 ft upstream from Sandy Run, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--1.01 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1970 to September 1972.
Water temperatures: January 1971 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 3,030 micromhos Nov. 27; minimum 133 micromhos May 15.
pH: Maximum, 6.0 July 15; minimum, 2.1 on several days during October, December, February and March.
Water temperatures: Maximum, 30.0°C July 23-25; minimum, freezing point on many days during November to February.

Period of record:
Specific conductance (1971-72): Maximum, 3,030 micromhos Nov. 27, 1971; minimum, 133 micromhos May 15, 1972.
pH (1971-72): Maximum, 6.0 July 15, 1972; minimum, 2.1 on several days during October and December 1971, February and March 1972.
Water temperatures (1971-72): Maximum, 30.0°C July 23-25, 1972; minimum, freezing point on many days during 1971 and 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since January 1971. Maximum recorded water temperature of 30.5°C occurred on Aug. 16, 17, 23, 1971. In addition to the continuous recorder, samples were collected on an approximate bi-weekly basis and partial analyses were made on these samples.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.											
14...	1400	.04	44000	14000	860	1290	550	7.4	1710	2.9	19.0
29...	1430	.03	52000	16000	1100	1620	580	9.9	2000	2.9	19.5
NOV.											
09...	1610	.03	45000	1800	930	1400	380	8.1	1730	3.0	4.0
22...	1435	.03	45000	17000	940	1410	620	8.7	1820	2.9	4.5
DEC.											
07...	1315	9.2	2000	1800	110	186	110	.5	282	4.3	9.0
20...	1500	.66	16000	4600	290	456	210	2.0	761	3.2	5.5
JAN.											
10...	1130	2.3	9700	2300	190	288	130	1.2	500	3.5	5.5
19...	1315	.39	20000	5000	350	586	230	2.6	887	3.2	3.0
FEB.											
03...	1430	1.2	10000	3100	220	330	180	1.3	579	3.5	.5
15...	1130	5.2	8700	1300	130	192	100	1.0	384	3.5	3.5
28...	1400	1.7	14000	2000	200	304	150	1.6	584	3.4	7.0
MAR.											
14...	1320	.70	15000	3100	240	372	180	2.0	675	3.3	5.5
28...	1400	.91	14000	2400	220	370	180	1.8	652	3.3	12.5
APR.											
14...	1230	5.0	6500	1200	140	224	110	.9	405	3.6	13.0
24...	1315	3.4	10000	1600	150	242	130	1.1	419	3.6	12.5
MAY											
18...	1400	1.6	8600	1600	170	268	130	1.2	506	3.4	19.0
JUNE											
02...	1400	.12	31000	4200	400	676	310	3.8	1080	3.0	21.0
19...	1435	.10	37000	5400	480	792	340	5.1	1320	2.9	26.5
JULY											
05...	1400	.34	6000	4500	280	496	230	2.0	755	3.2	19.0
19...	1100	.22	16000	5300	360	578	260	3.0	977	3.1	22.0
AUG.											
02...	1400	.03	18000	10000	760	1100	500	6.8	1500	3.1	24.0
21...	1335	.50	14000	4700	290	480	240	2.2	776	3.2	22.0
SEP.											
06...	1400	.12	7600	6700	380	624	290	3.2	900	2.9	20.5
27...	1420	.42	11000	4800	280	442	170	2.2	775	3.4	19.5

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1640	1530	2000	1860	1460	1390	1120	730	1130	851	630	542
2	1720	1640	1940	1280	1550	1460	1150	720	929	799	548	194
3	1780	1710	1730	1560	1560	1490	855	640	831	465	415	277
4	1850	1770	1760	1680	1500	1440	872	428	708	530	491	332
5	1930	1810	1750	1560	1530	1380	660	425	794	708	548	489
6	2980	1900	1760	1620	1380	316	908	660	811	784	616	482
7	2990	2980	1640	1520	454	229	1050	690	1020	793	601	338
8	3000	2990	1710	1620	600	443	1160	828	1050	910	492	333
9	3000	2130	1740	1670	705	600	1180	556	957	604	546	456
10	2330	2090	1750	1640	821	703	623	348	980	907	571	522
11	2330	2220	1740	1690	913	608	797	623	1020	878	590	524
12	2300	1900	1770	1740	987	913	939	797	990	663	745	531
13	2290	2060	1830	1770	1070	987	959	674	663	250	756	730
14	2130	1670	1890	1830	1110	865	1050	913	568	373	730	529
15	1930	1740	1890	1870	895	558	1060	561	445	316	703	689
16	1980	1860	1930	1860	745	615	1270	611	540	445	712	366
17	1930	1860	1960	1900	816	740	1190	638	612	535	419	320
18	1930	1890	1950	1610	915	816	966	624	608	488	499	322
19	2140	1050	1930	1630	944	910	894	831	672	528	558	499
20	2120	1920	1830	1640	923	702	901	822	717	589	652	558
21	2070	2030	1830	1690	888	799	914	846	692	506	615	503
22	2090	1900	1880	1830	1060	888	917	831	839	569	503	309
23	1980	1850	1920	1770	1100	711	837	694	920	839	506	321
24	1850	1640	2770	1880	1120	1050	697	606	1150	837	520	490
25	2140	1750	2900	1910	1170	1120	609	361	1050	762	556	498
26	2160	2130	3020	2300	1210	1170	802	571	915	717	593	547
27	---	---	3030	2100	1250	1210	906	626	760	665	582	555
28	2140	2100	2150	2070	1230	848	1110	742	676	565	---	---
29	2100	2040	2170	1420	1200	1110	1090	954	610	578	577	521
30	2040	1980	1440	1370	1180	1070	1270	1000	---	---	625	570
31	1980	1920	---	---	1100	1090	1170	1090	---	---	649	488
MONTH	3000	1050	3030	1280	1560	229	1270	348	1150	250	756	194

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	647	598	620	518	1040	968	813	602	1610	1540	1330	1070
2	627	467	641	487	1070	996	859	813	1600	1550	1490	1080
3	636	598	643	580	1150	1030	892	555	1830	1170	1380	512
4	---	---	687	639	1270	1120	789	752	1610	406	982	777
5	---	---	750	559	1390	1120	839	764	1080	872	1090	966
6	---	---	750	734	1450	1170	891	847	1290	1070	1020	941
7	---	---	767	730	1580	1230	1080	889	1350	1050	1080	1020
8	355	311	756	552	1690	1260	995	930	1550	1120	1120	636
9	399	327	616	135	1720	1200	1100	669	1600	1510	857	720
10	445	399	392	229	1660	1320	943	826	1640	1550	926	857
11	501	442	658	392	1750	1430	1040	943	1680	1610	1050	922
12	548	501	555	490	1880	1450	1120	1020	1690	1590	1060	419
13	538	394	774	524	1700	1280	1160	1100	1680	1590	725	561
14	459	389	569	507	1590	1240	1210	1090	1750	1650	808	725
15	476	452	507	133	1510	836	1220	365	1740	1650	917	808
16	487	366	---	---	1160	820	652	373	1780	1710	957	913
17	408	361	---	---	1160	1000	794	573	1810	582	998	946
18	433	358	515	501	1270	1150	967	794	647	280	1020	975
19	500	466	561	510	1490	1120	1020	956	642	371	996	697
20	502	494	575	499	1460	980	1100	1000	740	475	962	915
21	494	468	626	575	1230	1100	1140	1040	877	597	948	948
22	---	---	692	626	1260	1180	1210	1100	904	831	1270	957
23	372	348	751	579	1250	1150	1260	1190	1010	904	---	---
24	454	372	796	745	1280	1120	1360	1240	1110	1010	1020	583
25	611	425	861	743	1330	1040	1390	1280	1180	1110	762	677
26	492	456	916	841	1480	1040	1440	1360	1220	1120	806	661
27	475	449	963	882	1510	1070	1460	1370	1190	1150	861	739
28	492	463	1000	926	1500	1030	1470	1420	1270	1180	915	861
29	502	480	1050	772	1350	299	1530	1460	1320	1030	932	364
30	519	502	968	709	625	400	1570	1490	1360	1040	602	471
31	---	---	960	847	---	---	1690	1560	1330	1050	---	---
MONTH	647	311	1050	133	1880	299	1690	365	1830	280	1490	364
YEAR	3030	133										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.8	2.6	2.7	2.5	3.5	2.8	3.4	2.6	3.4	2.1	3.7	2.9
2	2.8	2.6	3.0	2.5	3.4	2.4	3.6	2.6	3.9	2.9	4.7	3.0
3	2.7	2.6	3.0	2.7	3.6	2.5	4.0	3.0	4.7	3.2	3.9	3.1
4	2.8	2.6	3.3	2.8	3.7	2.4	3.8	2.9	5.2	3.6	4.0	2.8
5	2.7	2.5	3.4	2.6	4.2	2.6	3.9	3.1	4.4	3.2	3.6	2.8
6	3.1	2.3	3.2	2.6	4.5	2.6	3.6	3.0	4.5	2.8	3.6	3.1
7	2.4	2.1	2.9	2.4	4.6	3.9	3.5	2.7	4.2	2.8	4.1	3.2
8	2.4	2.2	3.3	2.3	3.9	3.6	3.4	2.6	3.9	2.8	4.2	3.2
9	2.5	2.2	3.1	2.5	3.7	3.3	4.1	2.7	3.8	2.9	4.1	3.2
10	2.6	2.5	3.0	2.6	3.4	3.0	3.8	2.9	3.5	2.6	4.6	3.2
11	2.6	2.4	3.0	2.4	3.7	3.1	3.4	2.9	3.7	2.7	4.0	3.0
12	3.0	2.4	3.1	2.5	3.9	3.2	3.6	2.9	4.0	2.9	3.6	2.8
13	2.9	2.5	3.2	2.8	3.9	3.3	3.8	2.9	5.1	3.3	---	---
14	2.8	2.5	3.2	2.9	3.8	3.2	4.1	3.1	3.9	3.2	3.1	2.5
15	2.9	2.6	3.1	2.8	3.5	3.0	4.1	2.7	3.8	3.0	4.0	2.1
16	2.7	2.6	3.1	2.9	3.6	3.1	4.0	3.6	3.6	2.6	---	---
17	2.6	2.5	3.1	2.8	3.5	3.1	4.0	2.7	3.3	2.3	2.9	2.1
18	2.6	2.5	3.2	2.9	4.0	3.1	4.1	3.2	3.3	2.4	2.9	2.1
19	2.7	2.4	3.2	2.9	3.4	2.9	4.4	2.6	3.2	2.3	3.1	2.5
20	2.6	2.4	3.1	2.8	3.7	3.0	4.8	3.4	5.0	2.4	3.4	2.8
21	2.6	2.4	3.2	2.7	3.5	3.0	4.2	3.4	4.6	2.5	3.5	2.7
22	2.6	2.5	3.1	2.6	3.6	2.6	3.8	3.2	4.8	2.7	4.2	3.5
23	2.6	2.5	3.4	2.7	3.3	2.3	3.9	3.2	4.3	2.7	3.8	3.0
24	2.7	2.5	3.4	2.7	2.7	2.1	4.0	3.4	5.0	2.6	3.6	3.1
25	2.6	2.5	4.1	2.7	2.8	2.1	4.7	4.0	3.8	2.7	3.6	3.1
26	2.5	2.4	4.5	3.2	2.7	2.3	4.4	3.5	3.2	2.7	3.7	2.9
27	---	---	3.6	3.0	2.7	2.1	4.7	3.4	4.8	2.9	3.2	2.6
28	2.5	2.4	3.4	2.7	2.7	2.2	4.0	2.9	4.0	3.0	3.3	2.9
29	2.7	2.5	4.2	2.5	2.7	2.3	3.5	2.4	4.5	2.8	3.3	2.9
30	2.8	2.5	3.3	2.8	2.8	2.3	3.9	2.6	---	---	2.9	2.7
31	2.8	2.6	---	---	3.5	2.4	3.8	2.3	---	---	2.8	2.7
MONTH	3.1	2.1	4.5	2.3	4.6	2.1	4.8	2.3	5.2	2.1	4.7	2.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.8	2.7	---	---	3.1	2.6	3.1	2.6	---	---	3.0	2.9
2	3.2	2.7	3.0	2.8	3.0	2.6	2.9	2.8	---	---	2.9	2.7
3	3.0	2.8	3.0	2.7	2.8	2.6	3.1	2.8	---	---	4.4	2.8
4	3.2	2.9	3.2	2.9	2.9	2.6	3.1	2.8	---	---	3.4	3.2
5	3.2	2.7	3.2	2.7	2.8	2.6	3.0	2.5	---	---	3.4	3.2
6	3.2	2.8	2.9	2.7	2.9	2.7	3.0	2.5	---	---	3.2	2.9
7	3.3	2.7	2.9	2.7	2.9	2.5	3.0	2.8	---	---	2.9	2.8
8	3.4	3.2	2.9	2.7	2.8	2.5	3.1	2.7	---	---	3.4	2.8
9	3.2	3.1	5.2	2.9	2.9	2.6	3.1	2.7	---	---	3.3	3.0
10	3.2	3.0	4.6	3.3	2.8	2.6	3.1	2.7	---	---	3.1	2.9
11	3.1	3.0	3.4	2.7	2.5	2.6	2.8	2.7	---	---	2.9	2.9
12	3.0	2.9	3.2	2.7	2.7	2.7	2.9	2.7	---	---	---	---
13	3.0	3.0	3.0	2.7	---	---	2.9	2.7	---	---	---	---
14	3.2	3.0	2.9	2.7	---	---	3.0	2.6	---	---	---	---
15	3.2	3.1	---	---	---	---	6.0	2.6	---	---	---	---
16	3.2	3.1	---	---	---	---	5.5	3.0	---	---	3.1	3.0
17	3.6	3.2	---	---	---	---	3.1	3.0	---	---	3.1	2.9
18	3.5	3.1	3.3	3.1	2.7	2.5	3.0	2.8	---	---	3.1	2.9
19	3.2	3.1	3.1	3.0	2.8	2.7	3.0	2.7	---	---	3.4	2.9
20	3.2	3.1	3.3	3.0	3.0	2.4	---	---	---	---	3.1	3.0
21	3.7	3.1	3.2	2.9	2.7	2.5	---	---	---	---	3.2	3.0
22	3.5	3.3	3.1	2.8	2.8	2.6	---	---	---	---	3.1	2.8
23	3.4	3.2	3.0	2.7	2.8	2.6	---	---	---	---	3.0	2.9
24	3.4	3.3	3.0	2.7	2.7	2.6	---	---	3.2	3.0	3.5	2.9
25	3.4	3.1	3.1	2.6	2.8	2.5	---	---	3.1	3.0	3.5	3.2
26	3.2	3.0	2.8	2.6	2.6	2.5	---	---	3.0	3.0	3.3	3.1
27	3.2	3.0	2.9	2.6	2.6	2.4	---	---	3.0	3.0	3.2	2.9
28	3.3	3.0	2.9	2.6	2.6	2.4	---	---	3.3	3.0	2.9	2.7
29	3.3	3.0	2.9	2.5	5.1	2.6	---	---	3.1	2.9	4.8	2.7
30	3.1	3.0	3.1	2.7	3.5	2.9	---	---	3.0	2.9	3.8	3.2
31	---	---	2.9	2.8	---	---	---	---	3.0	2.9	---	---
MONTH	3.7	2.7	5.2	2.5	5.1	2.4	---	---	---	---	4.8	2.7
YEAR	6.0	2.1										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.5	15.5	18.0	12.0	6.0	0.0	7.5	1.0	2.5	0.0	11.0	6.0
2	24.5	17.0	21.0	11.5	2.0	0.0	5.5	1.5	3.0	0.0	12.5	7.0
3	25.5	16.5	15.5	8.5	1.0	0.0	6.0	0.5	2.5	0.5	12.0	3.0
4	25.0	15.5	13.5	7.0	4.0	0.0	5.5	2.5	1.5	1.0	6.5	2.5
5	23.0	12.5	14.5	5.0	5.5	1.5	5.0	2.5	2.5	1.0	6.5	2.5
6	20.5	11.0	12.5	6.5	6.5	4.0	3.5	1.0	3.5	2.5	6.0	2.5
7	18.0	10.0	9.5	3.0	9.5	6.5	4.5	0.5	3.5	1.0	10.0	1.5
8	18.0	7.5	8.5	2.0	8.0	7.0	4.0	1.0	1.0	1.0	6.5	1.5
9	17.0	12.0	6.0	2.5	9.0	7.0	5.5	2.5	1.0	0.5	6.0	1.0
10	16.0	11.5	10.5	5.0	12.5	6.0	8.0	5.0	1.0	0.5	9.5	3.0
11	17.5	8.5	11.5	2.5	10.0	4.0	7.0	4.0	1.0	1.0	12.0	2.5
12	18.5	6.5	11.0	3.5	7.5	2.5	7.0	2.5	3.5	0.5	10.0	7.0
13	18.5	7.5	14.5	6.0	7.5	3.0	11.0	3.0	2.5	0.5	---	---
14	20.5	11.0	15.0	6.0	6.5	3.0	5.0	1.0	5.5	2.5	---	---
15	19.0	9.5	16.5	8.0	11.5	6.0	1.0	0.0	4.5	2.0	---	---
16	20.5	11.0	15.0	7.5	9.0	6.0	1.0	0.0	5.5	0.5	9.5	7.5
17	21.5	11.0	15.5	6.5	7.0	0.5	2.5	0.5	4.5	1.5	9.5	6.0
18	22.0	12.0	15.5	7.0	4.0	0.0	7.0	1.0	4.5	2.0	14.0	7.5
19	21.5	10.0	14.5	6.0	3.5	0.0	4.5	0.0	2.0	0.5	12.5	4.0
20	22.0	11.0	10.0	6.0	6.0	3.5	4.0	0.5	3.0	0.5	13.5	5.5
21	21.0	11.5	7.0	4.0	6.0	2.5	3.0	2.0	4.5	0.5	14.5	5.0
22	18.0	11.0	4.5	0.0	5.5	0.5	6.0	2.5	7.0	0.5	9.0	5.5
23	18.0	11.0	2.5	0.0	4.0	0.5	6.0	3.5	---	---	5.5	4.0
24	17.0	15.5	3.0	0.5	7.0	3.5	8.0	3.5	---	---	8.0	3.5
25	16.5	14.0	5.5	0.0	7.0	2.5	6.0	0.0	---	---	6.5	2.5
26	15.5	14.0	3.5	0.0	9.5	7.0	2.5	0.0	---	---	11.5	2.0
27	---	---	4.5	2.5	11.5	8.0	1.5	0.0	---	---	11.5	5.5
28	21.5	12.0	5.0	0.0	11.0	2.5	0.5	0.0	8.5	6.5	---	---
29	17.5	10.5	5.5	3.0	5.0	1.0	1.5	0.0	8.5	5.0	13.5	6.0
30	21.5	11.0	4.0	2.5	11.0	5.0	2.0	0.0	---	---	---	---
31	20.0	12.5	---	---	5.0	2.5	0.5	0.0	---	---	---	---
MONTH	25.5	6.5	21.0	0.0	12.5	0.0	11.0	0.0	8.5	0.0	14.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	20.5	11.5	27.0	20.5	24.0	21.0	25.0	18.0
2	---	---	18.0	12.0	23.0	11.0	22.5	11.0	24.5	21.0	23.5	18.5
3	---	---	23.5	11.5	24.0	10.5	20.0	10.5	25.0	21.5	20.0	18.5
4	---	---	17.5	10.5	25.0	11.0	19.0	10.0	22.5	19.0	22.5	17.5
5	---	---	16.5	11.0	26.0	10.0	20.5	16.0	25.0	17.0	20.5	17.5
6	---	---	---	---	19.0	10.0	20.5	13.5	22.5	17.5	22.0	14.5
7	---	---	---	---	24.0	10.5	20.5	13.5	24.0	20.0	22.0	15.0
8	---	---	17.0	11.0	23.5	10.0	22.0	15.0	25.0	18.0	19.5	16.0
9	---	---	16.0	14.0	21.5	10.0	23.0	17.0	23.5	18.0	22.5	17.0
10	14.5	13.0	18.0	11.0	22.5	10.0	22.0	18.0	24.5	18.0	21.0	14.5
11	18.5	10.5	21.0	8.5	21.5	9.5	26.0	18.5	25.5	18.0	21.0	16.0
12	---	---	24.0	10.0	22.0	9.5	27.5	19.5	23.0	18.0	19.5	16.5
13	---	---	12.5	11.5	17.0	10.0	25.5	19.5	26.0	18.0	23.0	17.5
14	---	---	---	---	26.0	10.5	26.5	20.0	26.5	17.5	22.0	18.5
15	---	---	---	---	23.0	10.0	23.5	21.0	24.5	19.5	21.5	16.0
16	---	---	---	---	24.5	10.5	22.0	20.0	27.0	17.5	22.5	16.0
17	18.0	9.5	---	---	23.5	10.0	24.5	20.0	24.0	20.0	23.0	17.0
18	15.0	7.5	19.5	14.5	24.0	9.5	27.0	19.5	27.5	19.0	22.5	19.0
19	---	---	20.5	11.5	26.5	10.0	27.5	21.0	21.0	18.0	23.0	18.5
20	---	---	17.5	11.0	19.0	10.5	28.0	21.5	22.5	17.5	22.5	16.0
21	---	---	22.0	12.0	19.0	10.0	28.5	22.5	23.5	17.5	22.5	14.5
22	---	---	23.5	11.5	15.5	13.5	29.0	23.0	23.0	18.5	22.0	16.5
23	---	---	25.5	12.0	13.5	12.0	30.0	23.0	25.0	19.5	---	---
24	13.5	9.0	24.0	11.5	13.0	12.0	30.0	22.5	24.5	19.5	19.0	17.5
25	20.0	7.5	25.5	11.5	15.0	10.5	30.0	23.0	24.5	20.0	21.0	17.5
26	19.5	11.5	25.0	12.5	22.0	10.5	29.0	20.0	24.5	21.0	20.5	18.0
27	17.0	11.0	24.0	12.0	23.0	11.0	28.5	22.5	22.5	20.5	19.5	18.0
28	17.0	11.0	23.0	12.0	22.5	10.0	27.5	23.0	24.5	19.0	19.5	17.5
29	---	---	24.5	11.0	25.0	10.0	28.0	22.5	25.0	18.0	18.5	17.5
30	---	---	19.5	11.0	27.5	20.0	29.5	23.5	24.5	17.0	17.5	13.5
31	---	---	18.5	12.5	---	---	28.5	24.0	25.0	17.5	---	---
MONTH	---	---	---	---	27.5	9.5	30.0	10.0	27.5	17.0	25.0	13.5
YEAR	30.0	0.0										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°20'01", long 82°19'56", in T.11 N., R.16 W., Vinton County, at gaging station on right bank at upstream side of bridge on King Hollow Trail, 1,200 ft downstream from Harbargar Hollow, 2.6 miles upstream from spillway of Lake Hope, and 5.0 miles northeast of Zaleski.

DRAINAGE AREA.--4.99 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1959 to September 1961, April 1970 to September 1972.
Water temperatures: December 1970 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,330 micromhos Nov. 5; minimum, 100 micromhos Apr. 7.
pH: Maximum, 5.0 Feb. 13, May 9, June 29; minimum, 2.1 Aug. 31.
Dissolved oxygen: Maximum, 15.0 mg/l on several days during November and December; minimum, 4.0 mg/l Oct. 4.
Water temperatures: Maximum, 26.5°C July 23; minimum, freezing point on many days during November to March.

Period of record:
Specific conductance (1970-72): Maximum, 1,330 micromhos Nov. 5, 1971; minimum, 89 micromhos Mar. 7, 1971.
pH (1970-72): Maximum, 5.0 Feb. 13, May 9, June 29, 1972; minimum, 2.1 Mar. 25, 1971, Aug. 31, 1972.
Dissolved oxygen (1970-72): Maximum, 15.0 mg/l on several days during January, November and December 1971; minimum, 4.0 mg/l Oct. 4, 1971.
Water temperatures: Maximum, 27.5°C July 7, 1971; minimum, freezing point on many days during winter periods.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greated, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate bi-weekly basis and partial analyses were made on these samples. Special samples were also collected twice a year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.											
14...	1030	.16	2800	8600	420	690	330	2.3	931	3.7	12.0
29...	1330	.07	4300	11000	630	850	420	4.6	1130	3.7	13.0
NOV.											
09...	1030	.19	4600	1200	620	964	350	3.6	1180	3.7	2.0
22...	1315	.19	4700	11000	620	960	470	3.7	1210	3.7	2.5
DEC.											
07...	1630	30	1500	1000	120	180	100	.6	294	4.2	9.5
20...	1315	3.2	5500	3600	270	438	200	1.8	700	3.4	4.0
JAN.											
06...	1130	--	2300	3000	--	610	--	--	--	--	--
10...	1420	13	2000	1200	110	192	90	.6	300	4.2	6.0
20...	1130	1.9	3900	2400	210	344	150	2.4	570	3.7	.5
FEB.											
02...	1100	1.9	5400	2500	230	344	170	1.6	616	3.5	.5
15...	1330	29	2600	720	96	156	76	.6	295	3.9	4.5
29...	1130	8.3	3700	1100	130	204	100	1.0	379	3.7	5.0
MAR.											
14...	1220	4.7	3400	1200	140	224	110	1.0	420	3.7	6.0
29...	1425	5.4	410	1000	130	240	110	1.0	414	3.7	5.5
APR.											
14...	1045	25	1100	530	69	132	60	.4	198	4.3	10.0
24...	1230	50	1800	830	84	144	76	.6	245	4.2	11.0
MAY											
18...	1130	9.0	1500	780	96	164	87	.6	273	4.0	13.0
JUNE											
01...	1400	.80	1300	1600	160	272	140	1.0	469	3.8	14.5
19...	1240	.32	1700	2400	190	332	160	1.2	533	3.9	20.0
JULY											
05...	1445	1.9	330	2300	170	288	150	1.0	466	3.7	17.0
18...	1230	1.2	1700	2800	210	344	180	1.3	553	3.6	21.5
AUG.											
02...	1400	.02	1300	3600	190	284	160	1.0	528	4.0	21.0
21...	1240	1.7	1700	2900	200	328	170	1.1	529	3.8	19.0
SEP.											
08...	1130	.42	1900	4100	270	442	230	1.6	660	3.1	14.5
27...	1055	1.9	2200	3800	260	410	210	1.5	600	3.1	19.0

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.		
14...	<.5	7.0
JUNE		
01...	<.5	.0

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1060	982	1150	1100	---	---	810	716	639	573	381	305
2	1020	960	1180	1060	---	---	773	689	583	552	306	150
3	1010	946	1240	1160	1150	1120	692	567	552	384	390	200
4	990	924	1290	1170	1230	1120	636	378	475	381	398	323
5	985	915	1330	1160	1240	1150	380	224	544	441	453	348
6	977	911	1260	1150	1230	332	530	380	561	544	456	342
7	992	896	1300	1180	399	194	573	519	575	518	407	182
8	1040	925	1240	1160	579	382	615	554	632	575	381	237
9	971	923	1230	1140	644	559	615	242	633	570	423	320
10	1000	963	1140	1110	647	569	371	237	639	555	435	297
11	1050	946	1190	1080	735	595	500	371	623	566	444	293
12	1070	928	1170	1090	742	673	563	497	614	554	393	290
13	1040	927	1150	1060	756	657	627	513	600	179	394	300
14	955	880	1180	1070	740	625	665	591	231	197	426	384
15	1030	944	1200	1170	699	349	---	---	293	231	418	382
16	973	911	1230	1160	482	407	---	---	381	275	430	222
17	984	908	1240	1150	623	482	632	608	425	381	276	218
18	991	916	1210	1130	700	623	674	585	423	353	329	233
19	1030	917	1160	1110	743	678	593	516	486	375	378	285
20	1020	913	1180	1150	693	564	563	504	521	444	389	294
21	996	929	1170	1130	615	561	529	514	531	426	414	311
22	956	914	1200	1160	681	615	516	495	486	389	317	147
23	945	930	1210	---	714	659	529	292	572	456	323	213
24	988	925	---	---	665	639	307	252	456	243	348	294
25	1010	983	---	---	704	648	319	220	---	---	404	345
26	1040	1000	---	---	653	636	435	319	---	---	443	288
27	1130	1020	---	---	650	623	496	432	360	270	386	320
28	1150	1040	---	---	693	618	520	496	390	305	398	296
29	1200	1120	---	---	780	693	552	505	374	273	419	377
30	1240	1110	---	---	714	639	586	517	---	---	414	321
31	1200	1130	---	---	766	714	612	567	---	---	476	371
MONTH	1240	880	---	---	1240	194	810	220	639	179	476	147

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	495	432	387	372	473	458	411	336	512	497	617	590
2	443	392	401	380	485	473	452	411	510	492	609	563
3	483	357	403	382	491	476	492	444	507	491	632	345
4	387	123	395	380	495	474	484	452	524	416	627	482
5	240	176	395	382	492	460	486	458	611	498	654	627
6	329	225	406	385	497	473	500	466	638	611	663	653
7	296	100	427	406	507	492	495	466	654	638	665	610
8	204	155	437	421	510	488	495	482	656	645	700	635
9	---	---	485	122	503	486	545	492	645	632	863	666
10	---	---	220	164	560	455	544	543	647	623	678	672
11	222	166	295	226	558	534	594	540	627	606	677	664
12	257	169	324	301	534	503	542	525	617	602	671	496
13	213	147	361	324	557	495	536	522	629	615	625	442
14	216	176	362	295	576	557	531	521	626	600	648	603
15	246	216	323	158	614	367	627	512	602	586	657	648
16	264	126	232	151	482	278	540	236	606	573	656	648
17	238	154	269	232	---	---	549	483	576	527	661	645
18	258	156	302	262	---	---	561	549	527	144	704	665
19	296	257	323	298	512	381	567	561	411	255	666	587
20	304	260	364	300	576	504	564	555	441	291	665	614
21	286	155	368	335	601	576	563	542	528	441	662	636
22	---	---	373	366	612	586	557	545	567	528	665	626
23	---	---	382	364	613	586	516	506	611	567	665	652
24	270	237	415	378	606	563	548	541	582	575	666	628
25	283	270	430	412	601	587	544	527	591	575	662	623
26	367	287	426	410	587	576	545	527	587	576	633	618
27	369	326	428	412	582	566	536	527	621	586	650	606
28	392	336	443	410	576	536	544	527	617	587	667	642
29	378	307	457	442	572	335	536	518	617	586	666	367
30	377	362	502	445	336	288	527	518	647	581	660	362
31	---	---	517	433	---	---	521	504	612	588	---	---
MONTH	495	100	517	122	614	278	627	236	656	144	863	345
YEAR	1330	100										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.7	3.6	3.3	3.3	3.5	3.4	3.2	3.1	3.4	3.3	3.5	3.4
2	3.7	3.6	3.3	3.3	3.5	3.4	3.2	3.1	4.0	3.2	4.7	3.5
3	3.6	3.6	3.4	3.3	3.5	3.4	3.3	3.1	4.0	3.6	4.5	4.0
4	3.6	3.6	3.4	3.3	3.4	3.3	3.5	3.3	4.0	3.7	4.0	3.7
5	3.6	3.6	3.4	3.4	3.4	3.4	4.1	3.5	3.9	3.6	3.8	3.7
6	3.6	3.6	3.4	3.4	4.2	3.2	3.7	3.4	3.6	3.6	3.8	3.5
7	3.6	3.6	3.5	3.4	4.4	3.9	3.4	3.3	4.0	3.1	4.2	3.6
8	3.7	3.6	3.5	3.4	3.9	3.5	3.4	3.2	3.4	3.2	4.2	3.9
9	3.6	3.6	3.5	3.4	3.5	3.4	4.0	3.3	3.3	3.2	3.9	3.6
10	3.6	3.6	3.4	3.3	3.4	3.3	4.0	3.6	3.4	3.2	3.7	3.6
11	3.6	3.5	3.3	3.2	3.3	3.2	3.6	3.4	3.3	3.1	3.6	3.4
12	3.6	3.4	3.3	3.3	3.3	3.3	3.4	3.3	3.3	3.0	3.5	3.3
13	3.5	3.4	3.3	3.1	3.3	3.2	3.4	3.3	5.0	3.2	3.4	3.3
14	3.4	3.4	3.3	3.1	3.3	3.2	3.4	3.3	3.9	3.8	3.4	3.3
15	3.5	3.4	3.3	3.1	3.3	3.2	---	---	3.9	3.7	3.3	3.3
16	3.4	3.3	3.3	3.2	3.3	3.2	---	---	3.9	3.6	3.9	3.3
17	3.4	3.3	3.3	3.2	3.2	3.1	3.4	3.3	3.7	3.6	4.1	3.8
18	3.4	3.3	3.4	3.3	3.2	3.1	3.4	3.3	3.8	3.6	3.9	3.6
19	3.4	3.3	3.4	3.3	3.2	3.1	3.5	3.3	3.8	3.7	3.6	3.4
20	3.4	3.3	3.4	3.4	3.3	3.1	3.5	3.3	3.7	3.4	3.4	3.3
21	3.4	3.3	3.5	3.4	3.3	3.3	3.4	3.3	3.6	3.5	3.4	3.2
22	3.4	3.4	3.5	3.4	3.3	3.2	3.4	3.3	3.5	3.4	4.3	3.4
23	3.4	3.4	3.6	3.5	3.3	3.2	3.7	3.3	3.7	3.4	4.2	3.7
24	3.4	3.4	3.6	3.5	3.2	3.2	3.8	2.7	4.5	3.7	3.7	3.6
25	3.4	3.3	3.5	3.5	3.2	3.2	4.1	3.6	---	---	3.6	3.5
26	3.4	2.8	3.5	3.5	3.2	3.2	3.9	3.4	---	---	3.5	3.4
27	3.4	3.3	3.5	3.4	3.2	3.1	3.6	3.4	4.0	3.6	3.4	3.4
28	3.4	3.3	3.4	3.3	3.2	3.1	3.5	3.3	3.7	3.5	3.4	3.3
29	3.3	3.2	3.4	3.3	3.3	3.2	3.5	3.3	3.6	3.4	3.4	3.3
30	3.4	3.3	3.5	3.2	3.3	3.2	3.5	3.3	---	---	3.4	3.3
31	3.3	3.3	---	---	3.2	3.2	3.5	3.2	---	---	3.3	3.2
MONTH	3.7	2.8	3.6	3.1	4.4	3.1	4.1	2.7	5.0	3.0	4.7	3.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.3	3.2	3.4	3.3	3.4	3.3	3.7	3.5	3.5	3.4	3.3	2.7
2	3.4	3.3	3.3	3.3	3.4	3.3	3.5	3.4	3.5	2.9	3.4	3.2
3	3.3	3.3	3.3	3.3	3.4	3.3	3.5	3.3	3.5	3.4	3.6	3.0
4	4.4	3.3	3.4	3.3	3.4	3.3	3.4	3.4	3.5	2.9	3.3	3.1
5	4.1	3.5	3.5	3.3	3.4	3.3	3.4	3.4	3.4	3.3	3.1	2.9
6	3.5	3.3	3.4	3.3	3.4	3.3	3.4	3.4	3.4	3.3	3.1	3.0
7	4.8	3.3	3.3	3.2	3.4	3.3	3.5	3.3	3.3	3.3	3.1	2.9
8	4.5	4.2	3.3	3.2	3.4	3.4	3.5	3.3	3.4	3.3	3.1	2.9
9	---	---	5.0	3.2	3.6	3.4	3.4	3.3	3.4	3.3	3.0	2.8
10	---	---	4.9	4.1	3.5	3.3	3.3	3.2	3.5	3.4	3.2	3.1
11	3.5	3.4	4.1	3.6	3.5	3.3	3.3	3.3	3.5	3.4	3.2	3.0
12	3.4	3.3	3.6	3.4	3.6	3.4	3.4	3.3	3.5	3.4	3.3	2.9
13	3.7	3.4	3.5	3.4	3.5	3.4	3.4	3.3	3.5	3.4	3.3	3.0
14	4.2	3.7	3.5	3.4	3.4	3.4	3.4	3.3	3.5	3.3	3.1	3.0
15	3.9	3.6	4.9	3.5	3.6	3.1	3.4	3.0	3.5	3.4	3.1	3.0
16	4.5	3.7	4.9	4.0	3.6	3.4	3.6	3.2	3.5	3.3	3.1	3.0
17	4.5	3.9	4.0	3.6	---	---	3.3	3.2	3.5	3.4	3.2	3.1
18	3.9	3.5	3.8	3.5	---	---	3.2	3.2	4.6	3.0	3.2	3.1
19	3.7	3.5	3.6	3.4	3.3	3.3	3.2	3.2	---	---	3.3	3.1
20	3.7	3.5	3.5	3.3	3.4	3.2	3.2	3.2	3.5	3.3	3.2	3.1
21	4.4	3.7	3.4	3.3	3.2	3.1	3.3	3.2	3.3	3.1	3.2	3.1
22	---	---	3.4	3.3	3.3	3.2	3.3	3.2	3.2	3.1	3.2	3.1
23	---	---	3.3	3.3	3.4	3.3	3.3	3.2	3.1	3.0	3.3	3.2
24	3.7	3.6	3.4	3.2	3.4	3.3	3.3	3.3	3.2	3.0	3.3	3.0
25	3.7	3.5	3.3	3.2	3.4	3.3	3.4	3.3	3.2	3.2	3.2	3.1
26	3.7	3.5	3.3	3.3	3.4	3.3	3.4	3.3	3.3	3.1	3.2	3.1
27	3.6	3.4	3.4	3.3	3.4	3.3	3.4	3.3	---	---	3.1	3.1
28	3.6	3.4	3.4	3.3	3.4	3.3	3.4	3.4	---	---	3.4	3.1
29	3.5	3.4	3.3	3.3	5.0	3.3	3.4	3.4	---	---	3.8	3.2
30	3.4	3.3	3.3	3.2	4.6	3.7	3.5	3.4	---	---	3.9	3.6
31	---	---	3.4	3.1	---	---	3.5	3.4	3.3	2.1	---	---
MONTH	4.8	3.2	5.0	3.1	5.0	3.1	3.7	3.0	4.6	2.1	3.9	2.7
YEAR	5.0	2.1										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.3	4.2	9.7	5.8	15.0	13.7	12.0	11.4	13.1	12.7	12.1	11.0
2	7.2	4.3	9.9	6.7	15.0	8.9	11.7	11.1	12.9	11.8	12.6	11.2
3	7.2	4.1	10.1	8.3	12.0	11.0	12.5	11.7	11.8	11.3	13.2	10.5
4	6.7	4.0	11.2	9.2	12.1	11.5	11.8	11.2	11.9	11.6	13.0	9.6
5	7.2	4.1	11.9	10.3	11.7	10.6	11.9	11.3	11.8	11.2	13.2	5.6
6	7.4	4.4	12.2	10.4	10.7	9.5	12.2	11.9	11.6	11.5	13.3	5.7
7	7.7	5.1	13.5	10.6	10.2	7.9	12.4	11.8	12.6	11.6	12.5	7.2
8	8.0	6.3	15.0	13.3	10.5	7.6	12.4	10.0	12.5	11.7	7.8	6.2
9	7.0	5.5	15.0	14.5	10.4	9.8	12.0	11.5	12.2	11.8	8.5	4.8
10	8.5	5.7	15.0	13.5	9.8	9.0	12.6	10.8	12.2	11.5	9.3	6.1
11	8.8	6.9	15.0	13.8	10.3	9.2	11.3	10.9	12.2	11.9	9.7	6.0
12	8.9	7.2	15.0	13.1	10.7	10.1	11.8	11.1	12.3	11.8	9.0	6.2
13	9.2	7.3	14.8	12.9	11.2	10.1	11.4	10.7	12.7	11.9	7.1	5.7
14	11.6	7.1	15.0	12.9	11.1	10.8	12.1	11.4	12.6	11.6	6.4	6.0
15	12.3	9.9	13.7	7.2	10.8	9.9	---	---	12.7	12.1	7.3	6.4
16	11.3	8.7	15.0	8.4	10.8	10.2	---	---	13.1	12.0	7.1	6.5
17	10.8	7.6	15.0	9.4	11.4	10.6	13.2	11.9	12.6	12.2	6.9	6.5
18	10.2	7.0	15.0	12.5	12.3	11.4	13.7	12.9	12.6	12.1	8.0	6.6
19	9.7	6.9	14.2	12.4	12.3	11.9	13.5	12.4	13.0	12.5	---	---
20	8.8	6.2	15.0	13.5	11.9	11.1	13.1	12.7	13.0	12.7	12.4	11.2
21	9.2	4.9	15.0	14.3	11.5	11.1	12.7	12.4	13.0	12.0	12.4	10.8
22	7.8	5.3	14.5	10.4	12.4	11.5	12.4	11.8	12.6	12.0	12.4	11.3
23	7.5	4.9	14.[illegible]	9.9	12.4	11.8	12.1	11.8	13.0	12.6	12.7	12.4
24	7.4	5.6	15[illegible]	[illegible].5	12.0	11.1	12.2	11.6	12.7	11.5	12.9	12.0
25	8.0	6.3	15.0	[illegible].9	11.6	11.0	13.4	11.6	---	---	13.1	12.2
26	9.6	5.7	15.0	14.5	11.0	10.2	13.7	13.2	---	---	13.2	11.2
27	8.5	6.8	14.1	13.2	10.2	9.3	13.6	9.0	12.6	11.5	12.2	11.0
28	8.5	6.6	13.2	11.9	10.7	9.5	13.5	10.0	12.7	11.6	12.0	10.5
29	9.7	6.5	12.4	11.8	11.7	10.7	13.5	9.0	12.3	10.8	12.0	10.4
30	9.4	6.8	14.2	12.0	11.4	10.4	13.6	8.8	---	---	11.2	10.1
31	8.7	6.7	---	---	11.4	10.6	13.1	12.6	---	---	11.5	10.5
MONTH	12.3	4.0	15.0	5.8	15.0	7.6	13.7	8.8	13.1	10.8	13.3	4.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.7	9.9	7.9	9.5	8.8	9.2	8.0	6.0	5.5	6.6	6.3
2	11.4	10.5	9.3	8.0	9.5	8.3	9.0	8.0	6.1	5.2	6.5	5.6
3	11.7	10.1	9.0	7.7	9.1	7.5	8.3	8.0	5.6	5.1	7.5	5.8
4	12.0	10.3	9.0	8.2	8.8	7.3	8.8	8.1	8.1	5.0	7.9	7.2
5	12.8	9.3	9.9	8.4	10.0	7.5	8.8	7.4	8.0	7.4	8.2	7.9
6	11.4	8.8	9.4	7.8	9.5	8.0	8.4	7.5	8.0	7.3	8.8	8.0
7	11.6	8.4	9.2	7.9	9.4	7.9	8.2	7.4	7.5	6.9	8.3	7.6
8	10.6	7.7	8.9	8.1	9.6	7.6	8.3	6.8	7.5	7.0	8.3	7.7
9	---	---	10.0	8.5	9.4	7.5	7.1	6.3	7.4	6.6	8.3	8.0
10	---	---	10.3	8.8	8.7	7.7	6.7	6.2	7.6	7.2	8.8	8.2
11	9.2	7.0	10.8	8.6	9.7	8.0	6.6	5.8	7.6	6.9	8.7	8.0
12	8.7	6.2	10.2	8.4	9.5	7.2	6.3	5.4	6.9	6.6	8.4	7.9
13	7.8	6.4	9.8	9.0	8.1	7.1	6.2	5.3	6.9	6.6	8.5	8.1
14	7.2	6.0	9.4	8.5	8.5	7.2	5.9	5.1	7.1	6.3	8.3	8.0
15	8.6	7.2	9.7	8.5	7.8	6.0	5.9	4.9	6.3	5.8	8.4	8.1
16	9.6	8.3	9.8	8.7	6.7	5.3	6.1	5.5	6.6	5.9	8.5	7.9
17	8.7	6.2	10.3	8.6	---	---	6.0	5.6	6.4	6.0	8.3	7.8
18	9.9	7.4	9.4	8.0	---	---	6.0	5.3	---	---	8.0	7.6
19	10.2	8.1	9.6	8.5	7.1	7.0	5.8	5.1	8.4	7.9	8.3	7.5
20	9.6	8.2	9.7	8.7	8.1	7.1	5.7	5.0	8.5	7.7	8.8	8.2
21	10.3	8.6	9.6	8.2	8.6	7.6	5.5	4.7	8.0	7.2	9.2	8.6
22	---	---	9.2	8.2	8.8	7.9	5.3	4.6	7.6	7.2	8.9	8.5
23	---	---	8.9	8.2	9.5	8.3	5.2	4.7	7.6	7.1	9.1	8.4
24	11.1	9.3	9.5	8.2	9.6	8.4	5.4	4.7	7.6	7.2	9.2	8.5
25	11.2	9.0	9.1	8.1	9.3	8.4	5.5	4.8	9.5	6.6	10.5	9.2
26	11.2	8.8	9.4	8.2	9.0	7.7	5.7	5.4	7.3	6.3	10.1	9.8
27	11.2	8.5	9.3	8.4	8.6	7.3	5.5	5.2	7.4	7.1	9.8	9.5
28	11.0	8.5	9.6	8.5	8.5	7.0	5.7	5.3	6.5	6.1	9.3	9.0
29	10.5	8.6	9.2	8.0	9.2	7.0	5.8	5.5	6.5	5.8	9.6	8.8
30	10.1	8.2	8.7	8.0	9.4	6.5	5.8	5.4	6.3	5.9	10.5	9.3
31	---	---	8.9	7.7	---	---	6.2	5.4	6.7	5.9	---	---
MONTH	12.8	6.0	10.8	7.7	10.0	5.3	9.2	4.6	9.5	5.0	10.5	5.6
YEAR	15.0	4.0										

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03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	17.0	17.5	15.0	4.0	1.0	4.5	1.5	0.5	0.0	8.5	4.0
2	21.5	17.5	19.5	14.5	1.5	0.0	4.5	2.5	0.5	0.0	7.5	1.0
3	21.0	17.0	14.5	9.0	1.0	0.5	2.5	0.5	1.5	0.0	5.5	0.0
4	21.5	17.5	10.5	6.0	2.0	0.5	5.0	2.5	0.0	0.0	4.0	0.0
5	19.0	15.5	9.5	4.0	4.0	1.5	4.5	2.5	0.5	0.0	3.5	0.0
6	17.5	14.5	9.0	5.0	7.5	4.0	2.5	0.5	0.0	0.0	3.5	0.0
7	15.5	12.5	6.0	2.0	9.5	7.5	2.0	0.0	0.5	0.0	6.5	1.0
8	13.5	9.0	4.5	0.0	8.5	8.0	1.5	0.0	0.5	0.0	4.5	0.0
9	14.5	12.5	2.0	0.5	9.0	8.0	4.0	1.0	0.0	0.0	3.0	0.0
10	13.0	11.5	7.0	2.0	12.0	8.5	6.5	4.0	0.0	0.0	5.5	0.0
11	14.5	9.5	7.5	2.0	11.0	6.0	5.5	4.0	0.5	0.0	8.0	0.5
12	14.0	8.0	7.5	3.0	6.0	4.0	4.5	1.5	0.5	0.0	11.0	3.5
13	14.0	8.5	10.5	5.0	6.0	4.0	6.0	3.0	0.5	0.0	10.5	5.5
14	16.0	12.0	11.0	5.5	5.5	3.5	2.5	0.5	5.0	0.5	5.5	4.0
15	14.5	10.5	12.5	7.5	10.0	5.5	---	---	3.5	2.0	7.0	3.5
16	17.0	13.5	11.5	7.5	8.5	6.0	---	---	4.5	0.5	7.0	5.5
17	17.5	13.0	11.0	6.0	7.0	3.0	0.5	0.0	3.5	1.0	5.5	4.5
18	18.0	13.0	11.5	6.0	3.0	0.5	0.5	0.0	3.5	2.0	10.0	4.0
19	17.0	11.0	10.5	6.5	2.0	0.0	1.0	0.0	2.0	0.0	9.5	3.0
20	17.5	11.5	6.5	5.0	5.0	2.0	1.5	0.0	1.0	0.0	10.5	3.5
21	17.0	13.0	6.5	4.0	5.0	3.5	2.5	1.0	3.5	0.0	11.5	4.5
22	17.0	15.0	4.0	0.0	3.5	1.0	5.0	2.5	4.0	1.0	8.5	4.5
23	17.0	15.5	1.0	0.0	3.0	0.5	5.5	4.0	3.5	0.0	4.5	3.0
24	16.5	15.5	1.0	0.5	6.0	3.0	7.5	4.5	3.5	2.0	5.5	2.0
25	15.5	15.0	4.0	1.0	5.5	3.0	7.0	1.0	---	---	4.5	1.0
26	17.0	14.0	2.0	0.0	8.0	5.5	1.5	0.0	---	---	8.5	0.0
27	17.0	11.5	3.5	2.0	10.5	8.0	1.0	0.0	6.0	1.5	8.5	4.0
28	17.0	11.5	4.5	3.0	10.5	6.5	0.5	0.0	6.5	2.0	10.5	4.0
29	16.0	11.0	5.0	3.5	6.5	2.0	1.0	0.0	9.0	3.5	7.0	4.0
30	17.0	10.5	5.0	3.5	8.5	3.5	2.5	0.0	---	---	9.0	4.5
31	17.0	12.0	---	---	5.5	3.0	0.5	0.0	---	---	8.5	2.5
MONTH	21.5	8.0	19.5	0.0	12.0	0.0	7.5	0.0	9.0	0.0	11.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	3.0	18.5	11.0	16.5	11.0	19.0	14.5	24.0	19.0	22.0	17.0
2	6.5	3.0	16.5	13.5	18.5	12.5	18.0	16.0	23.0	19.0	21.5	17.5
3	9.0	2.0	18.5	13.0	20.0	14.5	18.5	17.0	24.0	20.0	19.5	17.5
4	9.0	4.5	14.5	11.0	21.0	16.0	17.5	16.0	21.5	19.0	19.0	17.0
5	12.0	2.5	14.0	8.0	21.0	15.0	17.5	15.5	20.5	17.0	17.5	15.5
6	14.0	5.0	18.5	10.0	18.0	15.5	16.0	13.0	19.5	16.0	18.0	14.0
7	10.0	3.5	17.0	12.0	20.0	13.5	16.0	12.5	21.0	18.5	18.5	14.5
8	7.5	3.5	15.5	14.0	19.5	12.5	17.5	13.5	20.5	17.5	18.0	16.0
9	---	---	14.5	10.5	19.0	15.5	19.0	15.5	21.0	17.0	19.5	17.0
10	---	---	17.0	7.5	18.0	12.5	18.5	16.5	19.5	13.5	17.5	14.0
11	12.5	10.0	18.0	7.5	16.5	9.5	21.5	17.0	21.5	13.5	18.5	15.0
12	15.5	8.5	19.0	9.0	17.5	10.5	23.0	18.5	20.0	16.5	19.0	17.5
13	12.0	11.0	14.5	11.0	16.5	15.0	21.5	18.5	22.5	16.5	21.0	18.0
14	13.0	10.0	17.5	12.0	19.5	15.0	23.0	18.5	24.5	16.5	20.5	19.0
15	13.0	9.5	17.0	12.5	20.0	17.5	21.5	19.5	23.0	19.0	19.5	17.0
16	15.5	10.0	15.0	11.5	20.0	16.0	20.5	19.5	24.5	15.5	19.5	16.5
17	17.0	9.0	16.0	10.0	---	---	21.5	19.0	23.5	19.0	20.5	17.0
18	18.0	7.0	17.5	10.5	---	---	23.0	19.0	21.0	18.0	21.0	18.5
19	14.0	9.0	18.0	11.5	20.5	19.0	23.5	20.5	19.5	17.0	21.0	18.5
20	13.5	11.5	15.5	13.0	19.0	17.5	24.5	20.5	20.0	17.0	19.5	16.0
21	11.5	8.0	18.5	13.5	18.0	15.5	25.0	21.5	19.5	16.5	19.0	14.5
22	---	---	19.0	13.5	15.5	13.5	25.5	22.0	20.0	18.0	19.5	16.0
23	---	---	20.0	14.5	13.5	12.0	26.5	21.5	21.5	18.5	17.5	13.5
24	12.5	8.5	19.0	13.0	13.0	12.0	25.5	21.5	21.5	19.0	18.0	17.0
25	14.0	7.0	20.0	14.0	15.0	12.5	25.0	20.5	22.0	19.0	19.5	17.5
26	14.5	5.0	20.0	15.5	18.0	12.0	23.0	18.0	22.5	20.0	19.5	18.0
27	15.5	5.5	18.5	13.0	18.5	14.5	23.0	19.5	22.0	20.0	19.5	18.0
28	16.0	6.5	18.0	12.5	19.0	15.0	22.0	19.5	21.0	16.5	18.5	17.0
29	14.5	8.5	18.5	13.5	17.5	15.0	21.0	18.0	20.5	16.5	18.5	18.0
30	17.0	11.0	17.0	15.5	16.5	14.5	20.0	18.0	21.0	15.5	18.0	13.0
31	---	---	16.0	12.5	---	---	23.5	17.5	21.5	15.5	---	---
MONTH	18.0	2.0	20.0	7.5	21.0	9.5	26.5	12.5	24.5	13.5	22.0	13.0
YEAR	26.5	0.0										

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO

LOCATION.--Lat 38°52'25", long 82°21'22", in SE 1/4 sec.26, T.6 N., R.16 W., Gallia County, at gaging station on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 miles upstream from Ryan Run, and 1.4 miles downstream from Indian Creek.

DRAINAGE AREA.--585 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1954, October 1964 to September 1972.
Water temperatures: October 1951 to September 1954, October 1964 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,240 micromhos July 10; minimum, 160 micromhos Apr. 13.
pH: Maximum, 8.8 Feb. 16; minimum, 2.0 May 6.
Dissolved oxygen: Maximum, 13.9 mg/l Feb. 14; minimum, 2.5 mg/l May 6.
Water temperatures: Maximum, 25.5°C July 22-25; minimum, freezing point on several days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
06...	1230	77	2	0	140	39	.2	.60
06...	1400	--	--	--	--	--	--	--
18...	1400	60	2	0	190	44	.3	.60
NOV.								
05...	1130	75	4	0	170	46	.2	.30
30...	1400	270	10	0	150	34	.2	1.0
DEC.								
10...	1400	2190	2	0	98	17	.2	1.0
29...	1600	298	2	0	130	32	.2	.40
JAN.								
24...	1405	780	5	0	93	16	.1	.90
27...	1300	893	3	0	130	32	.2	.60
FEB.								
29...	1600	1500	4	0	88	14	.2	.60
MAR.								
14...	1145	705	1	0	110	17	.2	.80
17...	1200	851	2	0	100	16	.1	.70
APR.								
06...	1055	938	3	0	120	22	.2	1.2
10...	1100	2760	2	0	77	8.5	.1	.70
MAY								
16...	1100	819	2	0	98	11	.1	.50
25...	1230	311	2	0	130	24	.2	.40
JUNE								
08...	1500	--	--	--	--	--	--	--
14...	1500	179	1	0	180	36	.3	1.0
16...	1200	200	0	0	240	31	.5	1.1
JULY								
05...	1400	192	0	0	220	53	.4	1.1
31...	1400	182	0	0	270	88	.5	.90
AUG.								
03...	1400	35	0	0	260	85	.4	.60
23...	1330	218	0	0	170	32	.4	1.4
SEP.								
12...	1130	50	0	0	250	84	.5	1.1
15...	1600	102	0	0	220	35	.4	1.0

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
15...	1225	14.0	52	3	.42
APR.					
06...	1315	11.5	945	27	69
17...	1235	15.0	3690	32	319
MAY					
22...	1420	17.0	484	34	44
SEP.					
18...	1115	21.0	89	0	.00

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

EXTREMES, Period of record:
Specific conductance: Maximum, 2,930 micromhos Nov. 20, 1964; minimum, 115 micromhos Mar. 23, 1952.
pH (1969-70, 1971-72): Maximum, 8.8 Feb. 16, 1972; minimum, 2.0 May 6, 1972.
Dissolved oxygen (1971-72): Maximum, 13.9 mg/l Feb. 14, 1972; minimum, 2.5 mg/l May 6, 1972.
Water temperatures: Maximum, 29.0°C June 16, 1952; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since May 1967. Maximum recorded dissolved oxygen concentrations of 15.0 mg/l occurred on several days during 1968-69, 1971. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
06...	2.7	266	150	150	452	--	--
06...	--	--	--	--	--	2.9	2.0
18...	2.7	360	180	180	556	--	--
NOV.							
05...	1.2	372	200	200	547	--	--
30...	4.4	312	170	160	470	--	--
DEC.							
10...	4.3	200	110	110	298	--	--
29...	1.7	284	140	140	424	--	--
JAN.							
24...	4.0	178	99	95	283	--	--
27...	2.5	248	120	120	394	--	--
FEB.							
29...	2.5	164	98	95	260	--	--
MAR.							
14...	3.7	198	110	110	314	--	--
17...	3.0	200	100	98	294	--	--
APR.							
06...	5.4	230	110	110	344	--	--
10...	2.9	136	73	72	212	--	--
MAY							
16...	2.2	164	95	94	266	--	--
25...	1.5	242	120	120	377	--	--
JUNE							
08...	--	--	--	--	--	4.9	.0
14...	4.2	336	160	160	505	--	--
16...	4.7	412	200	200	593	--	--
JULY							
05...	5.0	394	200	200	634	--	--
31...	4.0	522	250	250	858	--	--
AUG.							
03...	2.6	484	240	240	815	--	--
23...	6.0	282	160	160	483	--	--
SEP.							
12...	5.0	458	240	240	792	--	--
15...	4.4	342	200	200	595	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
18...	1115	1	1	1	6	75	98	100	--	--	--	--
18...	1120	1	4	6	10	14	16	16	17	17	51	100

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	410	390	520	500	520	460	420	410	380	340	310	270
2	420	410	510	490	650	520	430	330	380	370	300	190
3	420	410	490	490	650	640	340	300	380	350	310	230
4	420	420	500	490	650	620	380	320	360	340	310	260
5	430	420	530	500	660	650	320	240	400	360	330	270
6	450	420	540	520	650	470	340	270	400	360	360	290
7	470	450	540	530	500	260	370	330	---	---	340	280
8	480	470	550	530	420	350	370	340	---	---	350	300
9	490	460	570	550	410	320	360	300	---	---	310	300
10	480	470	580	560	320	300	300	260	---	---	319	300
11	490	470	570	560	350	310	310	270	---	---	310	290
12	500	480	560	550	370	350	320	290	---	---	310	290
13	510	490	560	550	380	370	340	320	---	---	320	300
14	---	---	560	550	400	380	340	320	260	220	320	310
15	---	---	580	550	400	400	340	320	260	220	350	320
16	---	---	570	550	400	390	340	330	230	220	350	340
17	---	---	580	570	440	400	340	330	250	230	340	330
18	540	530	590	570	430	420	---	---	260	250	370	340
19	560	540	590	570	450	430	370	360	300	250	375	350
20	550	530	580	570	450	420	360	350	300	290	380	350
21	550	530	570	560	420	410	360	340	340	300	360	330
22	560	540	570	560	450	420	360	340	360	310	330	300
23	560	540	570	570	430	420	360	340	380	310	350	300
24	560	480	580	570	430	420	340	280	350	200	345	320
25	520	490	570	560	440	430	330	320	300	190	355	300
26	530	510	570	560	450	440	380	330	270	210	315	305
27	520	510	580	550	450	440	410	380	250	220	325	315
28	520	510	560	530	440	430	400	350	250	230	335	325
29	530	510	560	460	440	430	360	350	270	250	340	335
30	530	520	470	450	430	410	360	350	---	---	350	340
31	530	510	---	---	420	410	360	350	---	---	365	350
MONTH	560	390	590	450	660	260	430	240	---	---	380	190

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	375	365	350	335	460	430	570	490	860	840	580	560
2	380	370	355	340	490	460	650	500	850	840	580	570
3	390	375	360	330	510	490	700	570	840	820	590	500
4	390	320	360	335	490	470	650	480	830	760	520	520
5	390	325	380	360	490	480	680	500	760	690	560	520
6	395	350	390	380	510	490	730	680	690	650	620	550
7	385	225	390	375	520	500	710	540	660	640	670	580
8	260	210	---	---	540	520	1000	510	680	640	720	670
9	270	240	---	---	550	540	1210	1000	640	640	780	700
10	240	230	320	230	540	520	1240	720	650	630	810	780
11	260	230	265	230	550	520	720	580	680	650	800	780
12	275	260	255	225	560	550	580	550	700	680	860	800
13	260	160	255	245	560	520	550	540	720	700	800	620
14	195	185	265	255	520	480	570	540	---	---	720	620
15	205	195	280	255	560	520	580	560	---	---	670	600
16	225	205	310	280	580	490	570	560	---	---	880	670
17	240	225	310	300	570	460	630	520	---	---	930	800
18	255	240	310	290	600	510	610	500	---	---	810	760
19	265	255	325	280	510	480	600	570	---	---	780	730
20	270	260	290	280	520	440	600	490	---	---	770	740
21	290	235	300	290	450	410	580	490	---	---	780	740
22	235	180	310	300	450	430	620	500	---	---	780	740
23	215	200	320	310	520	450	660	620	470	460	800	760
24	210	205	340	320	570	520	700	660	490	470	780	640
25	230	205	390	335	580	560	740	700	520	500	780	640
26	270	230	400	390	560	540	760	740	540	520	780	740
27	275	255	410	400	580	550	770	760	540	520	820	750
28	315	275	420	410	570	550	800	770	520	500	900	820
29	330	315	420	420	570	530	840	800	540	510	960	900
30	345	330	430	420	570	530	860	840	560	540	900	520
31	---	---	430	425	---	---	880	840	560	530	---	---
MONTH	395	160	430	225	600	410	1240	480	---	---	960	500
YEAR	1240	160										

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	4.9	5.8	5.6	6.6	5.6	7.1	6.3	---	---	5.8	5.2
2	6.6	5.2	6.1	5.8	5.8	5.2	7.7	6.5	7.4	6.4	5.7	5.0
3	6.7	5.1	5.9	5.8	5.7	5.2	8.0	7.1	7.0	6.0	5.6	4.9
4	6.7	5.2	6.3	5.8	6.8	5.7	7.6	7.0	6.3	5.7	5.4	4.7
5	6.8	5.5	5.8	5.1	6.3	6.0	7.5	7.0	6.5	5.0	5.3	4.9
6	6.5	4.6	5.5	5.0	7.1	5.9	7.0	6.1	---	---	5.6	4.8
7	5.7	4.0	5.3	5.0	7.2	5.7	6.6	6.3	---	---	6.5	5.4
8	---	---	5.9	5.2	5.7	5.3	---	---	---	---	5.6	4.9
9	---	---	5.5	5.3	5.3	5.1	---	---	---	---	6.0	5.6
10	---	---	5.8	5.3	6.0	5.1	---	---	---	---	7.5	5.7
11	---	---	6.4	5.3	5.7	5.2	---	---	---	---	7.3	5.9
12	---	---	6.4	5.5	5.7	5.0	---	---	---	---	7.2	6.3
13	---	---	6.8	5.8	5.6	5.2	---	---	---	---	6.5	5.2
14	---	---	6.5	5.4	5.7	5.2	---	---	8.3	5.6	5.7	4.7
15	---	---	6.4	5.5	6.2	5.7	---	---	8.2	7.6	6.2	5.4
16	---	---	6.3	5.4	6.0	5.4	---	---	8.8	7.1	5.9	5.3
17	---	---	6.8	5.7	5.4	4.9	---	---	7.5	7.0	5.7	5.5
18	5.8	5.4	6.6	5.8	5.5	4.9	---	---	8.0	6.7	7.3	5.3
19	6.0	5.4	6.2	5.6	5.8	5.2	8.4	6.7	6.7	5.7	6.5	5.2
20	6.1	5.5	6.0	5.6	6.7	5.8	7.3	6.5	7.3	5.7	7.6	5.5
21	5.8	5.5	6.0	5.8	6.5	5.8	7.2	5.8	7.2	6.2	6.1	5.4
22	5.6	5.4	6.0	5.8	6.7	6.1	6.4	5.8	7.3	6.3	6.1	5.3
23	5.7	5.5	6.0	5.7	7.3	6.3	6.3	5.9	7.2	5.9	6.1	5.4
24	6.3	5.5	6.0	5.8	7.5	6.9	6.2	5.8	7.8	7.0	6.2	5.5
25	6.1	5.6	6.3	5.8	7.8	6.7	5.9	5.2	7.4	6.3	6.7	5.8
26	5.8	5.6	6.2	5.8	7.3	6.8	6.1	5.0	7.3	5.9	8.0	6.2
27	5.9	5.5	6.7	6.2	7.0	6.5	6.6	4.8	6.8	5.8	6.9	6.2
28	6.1	5.4	7.0	6.2	6.5	5.6	7.1	6.5	6.9	5.9	6.6	5.8
29	6.1	5.5	7.2	6.2	6.6	5.6	7.4	6.7	8.0	5.8	6.2	5.5
30	6.0	5.5	6.6	6.3	7.0	6.2	8.0	6.6	---	---	6.1	5.4
31	5.9	5.5	---	---	6.7	6.4	---	---	---	---	6.3	5.2
MONTH	---	---	7.2	5.0	7.8	4.9	---	---	---	---	8.0	4.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	5.1	3.1	2.9	4.2	4.1	4.2	4.1	3.2	3.2	3.7	3.6
2	5.9	5.3	3.0	2.9	4.1	4.0	4.1	3.8	3.3	3.2	3.6	3.6
3	5.9	5.3	3.3	2.9	4.0	3.9	4.0	3.8	3.4	3.3	4.1	3.6
4	6.2	5.2	3.2	2.9	4.1	3.9	3.9	3.8	3.5	3.3	4.1	3.9
5	6.0	5.3	2.9	2.8	4.1	4.0	3.9	3.8	3.4	3.3	4.1	4.0
6	6.0	5.3	3.3	2.0	4.1	4.0	3.8	3.6	3.4	3.4	4.0	3.4
7	5.5	5.0	3.2	2.9	4.1	4.1	3.7	3.6	3.4	3.3	3.6	3.5
8	5.5	4.8	---	---	4.1	4.0	3.7	2.4	3.4	3.3	3.5	3.5
9	5.9	4.8	---	---	4.1	4.0	2.4	2.2	3.5	3.4	3.5	3.5
10	5.7	4.7	5.4	5.1	4.1	4.1	2.7	2.3	3.5	3.5	3.5	3.5
11	5.4	4.9	5.9	5.2	4.2	4.1	3.0	2.7	3.5	3.5	3.7	3.5
12	5.2	4.5	6.0	5.2	4.1	4.0	3.2	3.0	3.5	3.4	3.7	3.6
13	5.8	4.7	5.2	4.9	4.2	4.1	3.2	3.1	3.4	3.4	4.0	3.7
14	5.2	4.2	5.4	5.0	4.3	4.1	3.2	3.1	---	---	3.7	3.4
15	4.3	4.2	5.4	4.9	4.1	3.7	3.2	3.2	---	---	3.4	3.3
16	4.2	3.9	4.9	4.7	3.9	3.7	3.5	3.2	---	---	3.4	3.3
17	4.3	3.8	5.2	4.6	4.0	3.3	3.5	3.0	---	---	3.4	3.2
18	4.6	3.8	5.3	4.7	3.5	3.2	3.3	3.1	---	---	3.2	3.2
19	4.0	3.6	5.3	4.6	3.6	3.5	3.2	3.1	---	---	3.3	3.2
20	3.8	3.6	5.0	4.7	4.2	3.6	3.3	3.2	---	---	3.5	3.3
21	4.4	3.4	5.2	4.8	4.9	4.2	3.3	3.3	---	---	3.3	3.3
22	5.2	4.4	5.2	4.7	4.2	4.1	3.3	3.2	---	---	3.4	3.4
23	4.5	3.9	5.0	4.6	4.2	3.9	3.2	3.2	3.5	3.5	3.4	3.4
24	4.0	3.7	5.0	4.5	3.9	3.7	3.2	3.2	3.6	3.5	4.0	3.4
25	4.0	3.7	4.7	4.2	3.9	3.7	3.2	3.2	3.6	3.5	4.2	4.0
26	4.2	3.7	4.2	4.2	3.9	3.9	3.2	3.2	3.5	3.5	4.2	4.0
27	4.1	3.7	4.2	4.1	3.9	3.8	3.2	3.2	3.6	3.5	4.0	3.7
28	3.7	3.1	4.2	4.1	3.9	3.8	3.2	3.2	3.7	3.6	3.7	3.7
29	3.1	3.0	4.2	4.1	4.0	3.8	3.2	3.2	3.6	3.6	3.8	3.7
30	3.0	2.9	4.2	4.1	4.1	3.9	3.2	3.2	3.6	3.6	4.9	3.8
31	---	---	4.2	4.2	---	---	3.2	3.2	3.9	3.6	---	---
MONTH	6.2	2.9	6.0	2.0	4.9	3.2	4.2	2.2	---	---	4.9	3.2
YEAR	8.8	2.0										

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.9	7.6	7.6	7.2	10.4	9.9	8.2	7.9	---	---	10.2	9.9
2	7.8	7.2	7.4	6.9	10.5	10.2	8.5	8.1	9.5	8.9	10.0	9.8
3	7.5	6.9	7.6	7.0	10.6	10.2	8.7	8.5	9.1	8.9	10.4	10.0
4	7.1	6.6	8.4	7.5	10.4	10.1	8.7	8.4	---	---	10.7	10.4
5	7.1	6.5	10.6	8.4	10.3	9.9	9.0	8.6	---	---	10.8	10.7
6	7.4	6.3	9.6	9.2	10.0	9.2	8.8	8.5	10.2	8.8	10.9	10.8
7	6.8	6.3	10.1	9.3	11.9	9.0	---	---	---	---	10.8	10.4
8	7.0	6.7	10.3	10.0	11.5	9.4	---	---	---	---	11.4	10.4
9	7.1	6.7	10.5	10.3	9.5	8.5	---	---	---	---	11.6	11.3
10	7.1	6.7	10.5	10.3	9.1	8.3	---	---	---	---	11.5	10.2
11	7.3	6.9	10.3	10.2	8.4	7.9	---	---	---	---	10.2	9.2
12	7.4	7.1	10.2	10.0	8.2	8.0	---	---	---	---	9.4	8.8
13	7.3	7.1	10.0	9.7	8.5	8.2	---	---	---	---	8.8	8.1
14	---	---	9.8	9.5	8.5	8.3	---	---	13.9	13.3	9.8	7.9
15	---	---	9.6	9.3	8.4	7.9	---	---	13.3	13.1	9.9	9.7
16	---	---	9.3	9.1	8.0	8.0	---	---	13.2	13.0	9.7	9.6
17	---	---	9.1	8.9	8.5	8.0	---	---	13.0	12.7	9.6	9.6
18	8.1	7.6	9.1	8.6	8.9	8.5	---	---	12.7	12.4	9.6	9.5
19	8.3	7.3	8.7	8.2	9.0	8.8	13.0	12.8	12.4	12.3	9.7	9.4
20	8.4	7.8	8.6	8.1	9.0	8.5	13.1	12.7	12.6	12.4	9.5	9.2
21	8.1	7.5	9.4	8.4	9.2	8.6	13.1	12.6	12.6	12.2	9.2	8.8
22	7.7	7.2	10.2	9.3	9.1	8.1	12.6	11.7	12.3	12.2	8.8	8.7
23	7.6	7.1	10.4	10.1	8.1	7.4	12.0	11.7	12.3	11.9	9.1	8.8
24	7.5	6.9	10.7	10.2	7.5	7.2	11.8	9.4	12.2	11.7	9.0	8.9
25	7.8	7.2	10.7	10.5	7.3	7.1	9.9	9.3	11.8	11.4	9.2	9.0
26	8.1	7.5	10.6	10.3	7.3	7.1	10.1	9.4	11.4	11.3	9.3	9.2
27	7.8	7.4	10.8	10.2	7.2	6.9	10.5	9.4	11.3	11.0	9.2	8.9
28	8.2	7.6	10.3	9.9	7.3	7.0	10.0	9.7	11.6	10.5	8.9	8.6
29	8.5	7.9	9.9	9.6	8.5	7.3	10.0	9.6	10.5	10.2	8.9	8.6
30	8.4	7.8	10.2	9.8	7.5	7.3	---	---	---	---	9.0	8.7
31	8.0	7.6	---	---	7.9	7.5	---	---	---	---	9.6	8.6
MONTH	8.5	6.3	10.8	6.9	11.9	6.9	---	---	---	---	11.6	7.9

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.1	3.7	3.1	7.8	7.5	7.0	6.3	5.5	5.4	6.1	5.8
2	9.8	9.3	3.3	2.9	7.9	7.6	6.7	6.3	5.4	5.3	6.0	5.6
3	10.0	9.6	3.3	2.9	7.9	7.6	6.6	6.3	5.5	5.1	5.7	5.1
4	9.6	9.2	3.5	3.0	7.7	7.2	6.6	6.2	5.6	4.9	5.5	4.9
5	9.7	9.4	3.4	2.7	7.3	6.9	6.6	6.1	5.6	5.2	5.5	5.1
6	9.6	9.3	3.2	2.5	6.9	6.8	7.1	6.5	5.7	5.3	5.8	5.3
7	9.7	9.2	---	---	7.1	6.8	7.3	6.7	5.6	5.2	5.9	5.7
8	9.9	9.7	---	---	7.1	6.8	7.2	6.3	5.5	5.1	5.9	5.6
9	10.1	10.0	---	---	6.9	6.7	6.4	5.4	5.5	5.0	5.9	5.6
10	10.1	10.0	6.9	8.3	7.0	6.6	6.7	5.6	5.6	5.2	6.1	5.9
11	10.6	10.2	8.3	8.1	7.2	6.9	6.6	5.7	5.5	5.3	6.3	6.0
12	10.4	9.0	8.2	7.8	7.5	7.1	6.0	5.1	5.3	5.0	6.2	5.8
13	9.0	8.1	8.4	7.0	7.2	6.7	6.2	5.1	5.1	4.6	5.8	5.4
14	8.1	7.4	8.5	6.8	6.8	6.2	6.2	5.2	---	---	5.8	5.5
15	7.4	7.3	8.9	6.4	6.8	6.3	6.1	5.3	---	---	6.1	5.6
16	7.5	7.3	6.4	6.2	6.9	6.4	6.2	5.5	---	---	6.4	6.1
17	7.8	7.5	6.3	6.2	6.8	6.5	5.7	5.5	---	---	6.5	6.2
18	7.9	7.6	6.2	6.0	7.0	6.8	6.1	5.7	---	---	6.6	6.3
19	7.7	7.0	6.1	5.8	6.9	6.5	6.0	5.7	---	---	6.5	6.2
20	7.0	6.3	8.8	5.5	6.5	6.2	5.9	5.6	---	---	6.7	6.4
21	6.3	5.0	7.1	6.7	6.6	6.3	5.7	5.4	---	---	6.9	6.7
22	8.2	5.7	6.7	6.4	7.1	6.5	5.5	5.2	---	---	7.0	6.6
23	8.1	7.6	6.5	6.2	7.5	7.0	5.8	5.6	8.0	6.6	7.3	7.0
24	7.6	7.3	6.3	6.1	7.9	7.5	5.7	5.4	6.7	6.3	7.0	6.6
25	7.3	6.4	7.8	6.1	8.1	7.7	5.6	5.4	6.4	6.2	6.6	6.4
26	6.4	5.9	7.7	7.5	8.1	7.5	5.6	5.4	6.2	5.9	6.9	6.4
27	5.9	3.8	7.8	7.6	7.8	7.2	5.6	5.4	6.1	5.8	6.8	6.3
28	4.4	3.9	7.8	7.6	7.5	6.9	5.5	5.3	6.1	5.9	7.0	6.3
29	4.2	3.5	7.7	7.4	7.3	6.6	5.6	5.3	6.1	5.9	6.8	6.4
30	3.7	3.2	7.5	7.1	7.0	6.4	5.6	5.4	6.1	6.0	6.8	6.3
31	---	---	7.4	7.2	---	---	5.6	5.4	6.2	6.0	---	---
MONTH	10.6	3.2	8.9	2.5	8.1	6.2	7.3	5.1	---	---	7.3	4.9
YEAR	13.9	2.5										

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	19.5	16.0	15.5	4.5	3.5	5.5	4.5	0.5	0.0	7.5	6.0
2	21.0	20.0	16.5	16.0	3.5	2.0	5.5	4.5	1.0	0.0	8.5	7.0
3	20.5	19.5	16.5	13.5	2.0	1.0	4.5	3.5	1.5	1.0	7.0	5.0
4	20.5	20.0	13.5	11.0	1.5	1.0	4.5	3.5	1.5	0.0	5.0	4.0
5	20.5	19.5	11.0	9.5	3.0	1.5	5.0	3.5	0.5	0.0	4.0	3.5
6	19.5	18.0	9.5	8.5	5.0	3.0	3.5	2.0	0.5	0.0	3.5	3.0
7	18.0	16.0	9.0	6.5	7.5	3.0	2.5	1.5	---	---	5.5	3.5
8	16.0	14.0	6.5	5.5	8.0	7.5	3.0	2.5	---	---	5.5	4.5
9	15.0	14.5	5.5	4.5	9.0	7.5	---	---	---	---	4.5	4.0
10	14.5	13.5	5.5	4.5	10.0	8.0	---	---	---	---	5.0	4.0
11	13.5	12.5	5.5	4.5	9.5	9.0	---	---	---	---	6.0	4.0
12	13.5	12.0	6.0	5.0	9.0	7.5	---	---	---	---	7.5	5.5
13	13.5	11.5	7.0	5.5	8.0	7.0	---	---	---	---	9.5	7.5
14	13.0	---	6.0	6.0	7.0	6.0	---	---	1.5	1.0	9.5	7.5
15	---	---	9.0	7.5	8.0	6.5	---	---	1.5	1.5	8.0	7.0
16	---	---	9.5	8.5	8.0	7.0	---	---	2.0	1.5	8.0	7.0
17	---	---	9.0	8.0	8.0	6.5	---	---	2.5	1.5	8.0	6.5
18	14.5	14.0	9.5	8.0	6.5	4.5	---	---	3.0	2.0	7.0	6.0
19	14.5	13.5	10.0	9.0	4.5	3.5	1.5	1.0	3.0	2.0	7.0	6.0
20	15.0	13.5	9.0	8.0	4.5	3.5	2.5	1.5	2.0	1.5	8.0	6.0
21	15.5	14.0	8.0	6.0	4.5	4.5	3.5	2.5	3.0	1.5	9.0	7.0
22	16.0	15.5	6.0	4.5	4.5	3.5	4.0	3.0	3.5	3.0	9.0	8.5
23	16.0	16.0	4.5	3.0	3.5	3.0	5.0	4.0	3.5	2.0	8.5	6.5
24	16.0	16.0	3.5	3.0	4.0	3.0	6.0	5.0	3.5	3.0	6.5	5.5
25	16.0	15.5	3.0	2.0	4.5	3.5	6.5	4.5	4.0	3.0	5.5	4.0
26	16.0	15.5	3.0	2.0	6.0	4.5	4.5	3.0	4.0	4.0	4.5	3.0
27	15.5	14.5	3.5	3.0	8.0	6.0	3.0	1.5	4.5	4.0	5.5	4.5
28	15.0	14.0	4.0	3.5	8.0	7.0	1.5	1.0	5.0	4.0	7.0	5.5
29	15.0	13.5	5.0	4.0	7.0	5.5	1.0	0.5	6.5	4.5	7.5	6.5
30	14.5	13.5	4.5	4.5	7.0	6.0	1.0	0.5	---	---	8.0	6.5
31	15.5	14.0	---	---	6.5	5.5	0.5	0.0	---	---	8.0	6.5
MONTH	21.0	11.5	16.5	2.0	10.0	1.0	---	---	---	---	9.5	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	23.5	20.0	16.5	15.5	20.5	18.5	22.0	21.5	22.0	21.0
2	7.0	6.5	22.0	21.0	17.0	15.5	20.0	19.5	22.0	21.5	22.0	21.0
3	8.0	6.0	23.0	20.5	18.0	16.5	20.0	20.0	22.5	22.0	21.5	21.0
4	8.5	8.0	21.0	19.5	19.0	17.0	20.5	20.0	23.0	22.0	21.0	20.5
5	9.0	7.0	24.5	18.0	20.0	18.5	20.5	19.5	22.0	21.0	20.5	19.5
6	10.0	8.5	---	---	19.5	19.0	19.5	18.5	22.0	20.5	20.0	19.0
7	10.0	7.0	22.0	17.5	19.5	16.0	19.0	18.0	22.0	21.5	19.5	19.0
8	7.0	6.0	---	---	19.5	17.5	19.0	18.0	22.0	21.5	19.5	19.0
9	6.0	5.0	---	---	19.0	18.0	19.5	18.5	22.0	21.5	20.5	19.5
10	7.0	6.0	13.5	13.5	19.0	18.0	20.5	19.0	21.5	20.0	19.5	18.5
11	8.5	7.0	14.0	13.0	18.0	16.0	21.5	20.5	21.0	19.0	19.0	18.5
12	11.0	8.5	14.0	13.0	17.5	15.5	22.5	21.0	21.0	20.0	20.0	19.0
13	13.5	11.0	14.5	14.0	17.5	17.0	23.0	21.5	21.5	20.5	20.5	19.5
14	15.5	13.5	15.5	14.5	19.0	17.5	23.0	22.0	---	---	20.5	20.0
15	15.5	15.0	16.0	15.0	19.0	18.5	23.0	22.5	---	---	20.5	19.5
16	16.0	15.5	16.0	15.5	20.5	19.0	23.0	22.0	---	---	20.0	19.0
17	16.0	14.5	16.0	15.0	20.5	19.5	22.0	21.5	---	---	20.5	19.5
18	16.0	14.5	16.0	15.0	21.0	20.5	23.0	22.0	---	---	21.0	20.0
19	16.0	15.5	16.5	15.5	21.5	20.5	23.5	22.5	---	---	21.0	20.5
20	16.0	16.0	16.5	16.0	21.5	20.5	24.5	23.5	---	---	21.0	19.5
21	16.0	13.5	17.5	16.5	20.5	19.5	24.5	23.5	---	---	20.0	18.5
22	14.0	12.0	18.5	16.5	19.5	18.5	25.5	24.0	---	---	19.5	19.0
23	15.5	14.0	19.0	17.5	18.5	16.5	25.5	24.5	22.0	22.0	19.0	18.0
24	15.5	14.5	19.0	17.5	16.5	16.0	25.5	24.5	23.0	22.0	19.0	19.0
25	14.5	14.0	19.5	18.0	16.5	16.0	25.5	24.0	23.0	22.0	19.5	19.0
26	14.5	14.0	19.0	18.5	17.5	15.5	24.5	23.0	23.5	23.0	20.0	19.5
27	18.0	14.0	19.0	18.0	19.0	16.5	24.0	23.0	23.5	23.0	20.0	20.0
28	20.5	17.5	18.5	18.0	18.5	18.0	23.5	23.0	23.0	22.0	20.0	19.5
29	22.0	18.5	18.5	17.0	19.5	18.5	23.0	22.0	23.0	21.5	20.0	20.0
30	23.0	20.0	19.0	18.0	19.0	18.5	22.0	21.5	22.5	21.5	20.0	17.5
31	---	---	18.0	16.5	---	---	22.0	21.0	22.0	21.0	---	---
MONTH	23.0	5.0	24.5	13.0	21.5	15.5	25.5	18.0	---	---	22.0	17.5
YEAR	25.5	0.0										

03220000 MILL CREEK NEAR BELLEPOINT, OHIO

LOCATION.--Lat 40°14'54", long 83°10'26", Delaware County, at gaging station on left bank at upstream side of county road bridge, 1.2 miles west of Bellepoint, 1.5 miles upstream from mouth, and 2.3 miles downstream from Blues Creek.

DRAINAGE AREA.--178 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-69 (partial-record station), July 1970 to June 1971; water years 1971-72 (partial-record station).
Water temperatures: July 1970 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 30.5°C July 23; minimum, freezing point on several days during January and February.

Period of record:
Water temperatures: Maximum, 30.5°C July 23, 1972; minimum, freezing point on many days during 1971 and 1972.

REMARKS.--Duirnal fluctuation caused by stone quarry upstream from station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
09...	1130	8.4	--	--	--	--	--	--	--
JAN., 1972									
13...	1030	136	--	--	100	22	--	4.4	19
FEB.									
29...	1135	47	--	--	--	--	--	--	--
APR.									
24...	1520	363	--	--	63	11	--	3.0	13
JUNE									
23...	1100	14	--	--	150	19	--	2.3	10
AUG.									
07...	1335	14	256	0	280	65	.8	1.3	5.6

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
09...	--	--	--	--	--	1320	--	3.5
JAN., 1972								
13...	--	--	--	280	--	565	7.7	3.5
FEB.								
29...	--	--	--	--	--	854	--	3.0
APR.								
24...	--	--	--	220	--	435	8.3	12.0
JUNE								
23...	--	--	--	380	--	720	8.1	14.0
AUG.								
07...	.49	1.5	710	470	260	1060	8.0	22.0

03220000 MILL CREEK NEAR BELLEPOINT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	19.5	15.0	13.5	3.0	1.5	4.0	3.5	0.5	0.0	7.5	5.5
2	22.0	19.0	17.0	14.5	1.5	1.0	3.5	3.5	0.5	0.0	7.0	4.0
3	22.0	20.0	14.5	11.0	1.0	0.5	3.5	2.5	0.5	0.0	4.0	2.0
4	22.0	20.5	11.0	8.5	1.0	0.5	3.0	2.5	0.5	0.5	2.0	0.5
5	20.0	18.0	9.5	7.5	2.5	1.0	2.5	1.0	0.0	0.5	0.5	0.5
6	19.0	17.0	9.5	7.0	4.0	2.5	1.0	0.5	0.5	0.0	3.0	0.5
7	17.0	14.5	7.0	4.5	5.0	4.0	0.5	0.5	0.5	0.0	0.5	0.5
8	14.5	12.5	5.0	3.0	6.0	5.5	1.0	0.5	---	---	3.0	1.5
9	14.0	13.5	5.5	3.0	6.5	6.0	1.5	0.5	---	---	1.5	0.5
10	13.5	12.5	4.5	3.0	9.0	6.5	3.0	1.5	---	---	2.5	0.5
11	13.5	11.5	5.0	3.0	9.0	6.5	3.0	3.0	---	---	4.5	1.5
12	13.0	10.5	6.5	4.0	5.5	4.5	3.0	2.5	---	---	7.0	4.5
13	13.5	10.5	7.0	5.0	5.5	4.0	3.5	2.5	---	---	9.0	7.0
14	14.5	12.5	8.5	5.0	4.0	3.0	2.5	1.0	---	---	8.5	5.0
15	15.0	12.5	10.5	8.0	6.5	3.5	1.0	1.0	---	---	5.0	4.5
16	15.5	14.5	10.0	8.0	6.5	6.0	1.0	1.0	---	---	5.5	4.5
17	16.0	14.0	9.0	6.5	6.5	4.0	1.0	0.0	---	---	5.5	5.0
18	16.5	14.0	10.0	8.0	4.0	2.0	0.0	0.0	---	---	5.0	4.5
19	16.0	13.5	10.5	7.0	2.0	1.0	0.0	0.0	---	---	6.5	3.5
20	17.0	13.5	7.0	6.0	2.0	1.0	0.5	0.0	---	---	7.0	5.0
21	16.5	14.5	6.0	4.0	3.0	2.0	0.5	0.0	---	---	9.0	6.5
22	16.5	16.0	4.0	1.5	3.0	1.5	1.5	0.5	---	---	9.0	5.5
23	17.0	16.0	1.5	0.5	1.0	1.0	2.0	1.5	---	---	5.5	2.5
24	17.0	16.0	1.5	1.0	3.0	1.0	4.0	2.0	---	---	4.0	2.5
25	16.5	15.5	3.0	2.0	3.5	2.0	4.0	1.0	---	---	4.0	2.5
26	16.0	14.5	3.0	2.0	5.0	3.5	1.0	0.5	---	---	5.5	2.0
27	15.5	13.5	3.5	3.0	7.5	5.0	0.5	0.5	---	---	6.0	4.0
28	15.5	13.5	3.5	3.0	8.0	5.0	0.5	0.0	---	---	6.5	4.5
29	14.5	12.0	3.5	2.5	4.5	3.5	1.0	0.0	---	---	5.5	5.0
30	14.5	12.0	3.5	3.0	7.0	3.5	0.5	0.0	---	---	6.5	4.5
31	15.0	13.0	---	---	6.5	4.0	1.0	0.0	---	---	7.5	4.5
MONTH	22.5	10.5	17.0	0.5	9.0	0.5	4.0	0.0	---	---	9.0	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	19.0	16.0	17.5	13.5	25.0	18.5	25.0	21.0	27.0	20.5
2	6.5	4.5	20.0	16.0	20.5	15.5	22.0	20.0	24.0	21.0	25.0	21.0
3	8.0	4.5	18.5	16.0	23.5	18.0	22.0	20.0	24.0	21.5	22.0	19.0
4	9.5	7.0	17.0	12.5	25.5	20.0	20.0	18.0	23.5	21.0	24.0	18.0
5	10.5	6.0	17.5	11.5	25.0	18.5	19.0	17.5	23.5	18.0	25.0	16.5
6	13.5	8.5	19.5	14.5	21.5	19.5	19.0	17.0	21.0	18.0	26.5	16.0
7	11.5	1.5	20.0	16.5	24.0	17.0	18.5	17.0	22.5	19.5	26.0	16.0
8	1.5	0.5	18.0	14.5	23.5	17.5	21.0	17.0	21.0	19.0	21.5	18.5
9	5.0	1.5	14.5	10.5	23.5	18.5	21.5	19.0	20.0	18.0	23.0	17.5
10	7.5	4.5	12.0	9.0	21.5	17.0	22.0	21.0	21.0	17.0	24.0	15.0
11	10.5	4.5	14.5	11.0	22.0	15.0	25.0	21.0	23.0	17.0	24.0	17.5
12	13.0	9.5	17.0	12.5	22.5	15.5	24.0	22.0	24.0	19.0	23.0	20.0
13	16.5	12.5	16.0	14.5	20.0	19.0	25.0	22.0	27.0	20.0	26.5	20.0
14	16.0	14.0	15.0	13.5	23.5	19.0	26.5	22.5	28.0	19.5	23.0	21.0
15	15.0	13.5	15.0	14.0	22.5	21.5	25.0	23.0	27.0	22.0	21.0	18.5
16	15.0	14.0	15.0	14.5	23.5	19.5	23.5	22.0	28.0	19.0	22.0	18.0
17	14.5	12.5	16.5	14.0	22.5	19.0	22.0	21.0	29.0	22.0	24.0	19.5
18	16.0	12.5	16.5	14.0	22.5	18.5	24.0	22.0	28.5	23.0	22.0	21.0
19	15.0	14.0	20.0	16.0	25.5	19.5	25.0	22.5	25.0	22.5	22.5	20.5
20	14.0	11.5	19.5	17.5	23.0	21.5	26.0	23.5	26.0	21.0	22.0	18.5
21	11.5	10.0	22.0	17.5	21.5	18.0	28.0	24.0	27.0	21.0	22.0	17.0
22	11.5	9.5	23.0	19.0	18.0	15.5	28.5	25.0	24.0	22.0	21.5	17.0
23	13.0	11.5	24.0	19.0	14.5	14.0	30.5	25.0	23.0	22.0	18.0	15.0
24	11.5	11.0	24.5	19.0	14.5	13.0	29.0	25.0	24.0	21.5	19.0	16.5
25	12.5	9.0	25.0	19.0	16.0	13.5	27.0	23.0	24.0	22.0	20.0	18.0
26	13.5	9.0	24.0	19.0	20.0	15.0	24.0	22.0	25.0	22.5	20.0	19.0
27	14.5	10.5	24.0	18.5	22.0	16.5	23.0	21.5	24.0	22.0	20.0	19.0
28	15.0	11.0	23.0	18.0	22.0	19.0	23.0	21.0	25.0	20.5	19.0	17.0
29	15.5	13.0	22.5	18.0	22.0	19.0	23.0	19.5	26.0	20.0	18.0	18.5
30	19.0	14.0	20.5	18.0	21.0	19.0	24.0	19.0	27.0	19.0	18.0	15.0
31	---	---	18.0	14.5	---	---	25.0	20.0	26.0	19.0	---	---
MONTH	19.0	0.5	25.0	9.0	25.5	13.0	30.5	17.0	29.0	17.0	27.0	15.0
YEAR	30.5	0.0										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO

LOCATION.--Lat 39°47'37", long 83°00'40", Pickaway County, on left bank at Picway Plant of Columbus and Southern Ohio Electric Company, 0.4 mile downstream from Big Walnut Creek, and 3.2 miles downstream from Shadeville.

DRAINAGE AREA.--2,266 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1965 to September 1972.
Water temperatures: March 1965 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,060 micromhos Feb. 13; minimum, 236 micromhos May 9.
pH: Maximum, 9.5 June 30; minimum, 5.1 Mar. 16.
Dissolved oxygen: Maximum, 13.6 mg/l Mar. 4-6; minimum, 0.9 mg/l Oct. 23.
Water temperatures: Maximum, 29.0°C July 23, 24; minimum, freezing point Jan. 16.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	PH (UNITS)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.							
11...	1220	6.9	0	130	50	2.6	3.8
14...	1300	7.0	0	190	68	1.4	8.6
27...	0710	--	--	--	--	--	--
NOV.							
19...	1055	8.3	4	180	69	1.0	4.2
30...	0715	8.3	4	110	55	.4	3.0
DEC.							
02...	0940	6.9	0	140	62	.9	2.9
08...	0715	6.9	0	82	30	.3	2.9
JAN.							
05...	1100	8.1	0	100	36	.3	3.5
19...	0830	8.1	0	130	58	.6	4.7
FEB.							
11...	0800	7.1	0	160	87	1.1	8.6
17...	1045	8.2	0	92	48	.3	4.1
MAR.							
01...	0745	8.4	6	130	60	.7	4.0
24...	0810	7.8	0	82	29	.2	5.1
APR.							
07...	0720	7.2	0	130	48	1.1	9.2
24...	0740	7.8	0	40	13	.5	3.5
MAY							
10...	0720	7.6	0	39	13	.4	2.7
29...	0745	7.1	0	110	36	.8	4.9
JUNE							
15...	0930	--	--	--	--	--	--
16...	0715	8.1	0	93	31	.8	3.5
28...	1500	8.3	7	150	53	1.6	8.4
JULY							
20...	0745	7.8	0	57	22	.3	4.0
31...	0910	8.1	0	100	38	.4	6.9
AUG.							
17...	1100	6.9	0	170	55	.9	7.6
24...	0810	8.2	0	45	15	.2	1.8
SEP.							
08...	1015	6.9	0	170	57	1.2	7.2
27...	0835	8.1	0	53	18	.2	2.7

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

EXTREMES.--Period of record:

Specific conductance (1965-69, 1971-72): Maximum, 1,260 micromhos Feb. 9, 1966; minimum, 190 micromhos May 27, 1968.

pH (1971-72): Maximum, 9.5 June 30, 1972; minimum, 5.1 Mar. 16, 1972.

Dissolved oxygen (1965-68, 1970-72): Maximum, 14.6 mg/l Dec. 24, 1967; minimum, 0.0 mg/l on many days during 1965-68 and 1971.

Water temperatures (1965-69, 1971-72): Maximum, 33.0°C Aug. 16, 1965; minimum, freezing point on many days during 1967-69 and 1972.

REMARKS.--Continuous water-quality recorder operated since March 1965. Maximum recorded specific conductance value of 1,270 micromhos occurred Feb. 1, 1971. Maximum recorded dissolved oxygen concentration of 15.0 mg/l occurred Feb. 7-11, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, daily samples were collected by a local observer. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
11...	17	478	290	120	787	--	--
14...	38	582	310	130	982	--	--
27...	--	--	--	--	--	<.5	6.0
NOV.							
19...	19	618	230	70	974	--	--
30...	13	460	280	110	718	--	--
DEC.							
02...	13	506	280	120	813	--	--
08...	13	310	230	130	482	--	--
JAN.							
05...	15	382	260	130	576	--	--
19...	21	506	320	150	784	--	--
FEB.							
11...	38	592	350	160	960	--	--
17...	18	358	250	130	574	--	--
MAR.							
01...	18	480	310	150	778	--	--
24...	23	314	220	110	503	--	--
APR.							
07...	41	460	300	150	734	--	--
24...	15	198	160	65	340	--	--
MAY							
10...	12	162	130	56	300	--	--
29...	22	420	300	130	676	--	--
JUNE							
15...	--	--	--	--	--	<.5	9.0
16...	15	362	270	110	584	--	--
28...	37	514	330	160	832	--	--
JULY							
20...	18	260	200	88	424	--	--
31...	30	422	270	110	670	--	--
AUG.							
17...	33	514	290	150	802	--	--
24...	8.1	194	160	74	312	--	--
SEP.							
08...	32	538	320	160	859	--	--
27...	12	216	170	80	359	--	--

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	895	862	973	923	818	764	516	450	825	792	776	734
2	907	876	944	917	918	770	569	516	830	812	735	557
3	898	850	980	901	832	814	582	569	849	819	765	495
4	897	855	929	893	859	817	582	575	825	812	830	671
5	889	867	989	929	862	824	587	567	876	818	---	---
6	915	876	997	949	884	660	614	587	864	828	---	---
7	952	912	1020	920	777	570	620	605	908	824	613	593
8	948	903	920	836	600	481	633	611	927	909	674	613
9	955	916	886	839	684	600	645	627	912	897	672	617
10	990	835	899	837	724	664	678	635	941	902	632	611
11	835	759	961	894	726	700	644	578	960	933	644	616
12	841	772	928	906	750	726	594	578	986	959	653	632
13	910	838	951	921	781	750	623	594	1060	852	664	643
14	964	894	949	924	814	645	698	623	1000	789	684	663
15	894	814	934	883	722	522	747	698	789	621	672	616
16	886	825	910	865	649	507	767	740	621	546	616	590
17	904	874	946	856	720	649	777	749	630	563	600	544
18	910	858	992	860	749	717	786	761	639	617	544	512
19	888	858	1010	921	753	742	785	767	663	627	561	522
20	906	865	1020	879	754	709	791	761	696	663	595	561
21	939	894	959	852	742	711	780	753	716	681	640	595
22	1020	930	935	830	784	691	770	747	729	716	649	595
23	1050	972	965	860	712	669	759	725	746	728	596	499
24	972	851	956	813	729	709	734	714	758	744	551	500
25	854	805	915	729	727	718	735	710	780	758	570	542
26	866	815	1010	849	---	---	723	687	782	764	588	558
27	941	866	1010	926	753	738	695	680	776	756	593	571
28	970	926	959	884	758	737	722	693	768	753	630	591
29	977	929	888	695	737	731	809	722	780	755	662	598
30	988	932	804	612	735	557	810	770	---	---	669	614
31	970	935	---	---	557	381	792	765	---	---	655	598
MONTH	1050	759	1020	612	918	381	810	450	1060	546	830	495

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	647	595	495	398	632	598	780	711	727	688	749	716
2	620	602	591	495	614	569	730	670	766	731	762	731
3	649	612	618	579	622	593	678	513	792	757	765	711
4	698	642	630	588	640	620	587	530	792	759	713	696
5	715	696	638	605	695	555	645	547	789	747	726	699
6	742	715	651	633	701	695	648	591	810	789	759	725
7	759	380	671	646	725	628	589	540	816	589	818	759
8	462	304	657	543	754	712	551	533	682	645	865	818
9	547	442	614	236	787	743	551	521	720	564	871	822
10	499	461	393	290	784	630	564	512	693	606	867	825
11	492	470	432	365	674	614	571	528	748	685	840	805
12	516	492	425	402	703	674	568	544	775	708	813	685
13	514	339	446	418	714	614	588	531	789	768	705	670
14	411	351	486	352	721	616	584	562	780	744	750	694
15	435	411	473	377	673	590	606	577	751	742	812	677
16	492	430	482	436	608	579	617	572	802	746	700	388
17	460	400	472	467	614	577	585	492	808	780	494	400
18	477	420	469	427	653	614	614	458	870	318	571	490
19	520	477	458	426	677	622	460	427	411	285	610	571
20	555	405	499	454	717	677	463	418	415	303	649	613
21	399	306	564	495	746	717	515	463	478	414	674	641
22	375	333	588	555	776	746	538	509	568	478	700	671
23	367	336	608	586	790	760	568	535	522	292	731	692
24	396	330	627	603	809	781	581	550	387	279	746	608
25	417	378	657	623	809	785	607	553	405	336	641	533
26	444	400	679	653	791	773	629	578	515	398	568	317
27	459	427	694	670	814	447	638	617	567	500	401	311
28	456	381	692	667	838	812	655	617	598	550	518	374
29	399	368	682	662	851	776	664	611	653	587	532	500
30	398	371	686	592	801	745	698	659	670	643	508	319
31	---	---	707	470	---	---	695	665	727	660	---	---
MONTH	759	304	707	236	851	447	780	418	870	279	871	311
YEAR	1060	236										

SCIOTO RIVER BASIN

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.3	7.2	7.2	7.1	7.4	7.2	8.2	8.1	8.0	7.9	7.9	7.5
2	7.4	7.2	7.2	7.1	7.5	7.4	8.1	8.1	7.9	7.8	8.1	7.9
3	7.3	7.2	7.2	7.1	7.5	7.4	8.1	8.1	7.9	7.8	8.1	7.7
4	7.3	7.2	7.2	7.1	7.4	7.4	8.1	8.0	8.0	7.9	---	---
5	7.4	7.2	7.2	7.1	7.4	7.3	8.1	8.0	8.0	7.9	---	---
6	7.4	7.2	7.2	7.1	7.3	7.0	8.1	8.0	8.0	7.9	---	---
7	7.5	7.3	7.3	7.1	7.4	7.2	8.1	8.0	8.0	7.9	7.9	7.8
8	7.5	7.3	7.3	7.2	7.2	7.1	8.0	7.9	8.0	7.9	8.0	7.8
9	7.4	7.3	7.3	7.2	7.2	7.2	8.0	7.9	7.9	7.8	7.9	7.8
10	7.4	7.2	7.3	7.1	7.2	7.1	8.0	7.8	7.9	7.8	7.9	7.7
11	7.4	7.3	7.2	7.1	7.3	7.1	8.1	7.9	7.9	7.8	7.9	7.8
12	7.4	7.3	7.2	7.1	7.4	7.3	8.2	8.1	7.8	7.7	7.8	7.7
13	7.5	7.3	7.2	7.1	7.4	7.3	8.3	8.1	7.9	7.6	7.8	7.7
14	7.4	7.3	7.2	7.1	7.3	7.3	8.2	8.1	8.0	7.8	8.0	7.7
15	7.4	7.3	7.2	7.0	7.4	7.3	8.2	8.0	7.8	7.8	8.3	7.9
16	7.4	7.3	7.2	7.1	7.6	7.3	8.1	8.0	8.0	7.8	8.0	5.1
17	7.5	7.3	7.2	7.1	7.7	7.6	8.0	8.0	8.1	8.0	8.0	7.9
18	7.4	7.3	7.2	7.1	7.8	7.7	8.1	7.4	8.1	8.0	7.9	7.9
19	7.4	7.3	7.1	7.1	7.8	7.7	7.9	7.8	8.1	8.0	8.1	7.9
20	7.4	7.2	7.2	7.1	7.7	7.5	7.9	7.8	8.2	8.1	7.9	7.8
21	7.3	7.2	7.3	7.2	7.7	7.5	7.9	7.8	8.2	8.0	7.8	7.7
22	7.3	7.2	7.5	7.3	7.9	7.6	7.9	7.8	8.1	7.9	7.9	7.7
23	7.2	7.2	7.4	7.3	7.9	7.6	7.9	7.8	8.0	7.9	7.9	7.8
24	7.2	7.2	7.3	7.2	7.8	7.6	8.1	7.8	7.9	7.8	8.0	7.7
25	7.3	7.2	7.3	7.2	7.9	7.6	8.1	7.9	7.9	7.8	8.0	6.2
26	7.3	7.2	7.2	7.2	7.9	7.0	8.1	8.0	7.9	7.8	7.9	6.1
27	7.3	7.1	7.3	7.2	7.9	7.6	8.1	8.0	8.0	7.8	8.2	6.7
28	7.2	7.1	7.3	7.2	7.9	7.8	8.0	7.8	8.0	7.8	8.2	7.7
29	7.1	7.0	7.2	7.2	7.9	7.8	8.0	7.9	7.9	7.6	8.2	7.8
30	---	---	7.4	7.2	8.0	7.7	8.0	7.9	---	---	7.9	7.5
31	---	---	---	---	8.2	7.8	8.0	8.0	---	---	7.8	7.7
MONTH	7.5	7.0	7.5	7.0	8.2	7.0	8.3	7.4	8.2	7.6	8.3	5.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.4	7.9	7.6	7.7	7.5	8.5	6.2	8.0	7.6	7.7	7.5
2	7.8	7.8	8.1	7.6	7.7	7.5	8.1	7.2	7.8	7.1	7.8	7.6
3	7.9	7.8	7.7	7.3	7.9	7.6	8.1	6.5	7.8	7.1	7.8	7.6
4	7.8	7.7	7.5	7.1	7.8	7.7	6.9	6.6	7.9	7.6	7.9	7.7
5	7.9	7.7	7.6	7.3	7.7	7.7	7.7	6.8	8.1	7.7	8.1	7.7
6	7.8	7.7	7.5	6.9	7.7	7.5	7.7	7.5	8.1	7.8	7.9	7.7
7	8.0	7.5	7.5	7.0	7.7	7.5	8.5	7.5	8.1	7.6	7.9	7.8
8	8.1	7.9	---	---	7.5	7.4	8.4	7.2	8.1	7.9	7.8	7.1
9	8.1	7	7.4	7.2	7.5	7.4	8.1	7.0	8.0	7.7	7.9	7.4
10	8.0	7.3	7.6	7.1	7.9	7.8	8.1	7.0	8.0	7.7	7.9	7.6
11	7.9	7.8	7.9	7.4	7.6	7.5	7.8	6.7	8.0	7.8	7.9	7.7
12	7.9	7.8	7.6	7.1	7.6	7.5	7.8	6.7	8.0	7.8	8.0	7.2
13	7.9	7.6	7.6	7.6	7.7	7.4	7.9	6.9	8.0	7.8	8.1	7.4
14	7.6	7.5	7.6	7.5	7.7	7.5	7.5	6.7	8.0	7.7	7.8	7.4
15	7.8	6.8	7.6	7.4	7.6	7.4	7.6	6.7	8.2	7.6	8.0	7.5
16	7.6	7.1	7.7	7.4	7.7	7.5	7.6	7.0	8.1	7.6	8.1	7.7
17	7.7	7.2	8.0	7.6	7.7	7.5	7.4	7.0	7.9	7.5	8.0	7.7
18	7.7	7.3	7.6	7.6	7.9	7.6	---	---	8.3	7.3	8.2	7.5
19	7.7	7.6	7.6	7.4	7.9	7.5	---	---	8.4	6.3	8.1	7.5
20	7.9	7.4	7.5	6.9	7.6	7.4	---	---	8.3	6.4	8.1	7.4
21	9.2	7.0	7.5	7.3	7.6	7.4	7.5	7.2	8.8	8.0	7.7	7.4
22	7.7	7.5	7.5	7.1	7.6	7.4	7.7	7.4	9.2	7.9	7.7	7.3
23	8.1	7.6	7.5	7.0	7.6	7.5	7.6	7.4	7.9	7.1	8.4	7.4
24	8.2	7.5	7.4	6.9	7.6	7.5	7.7	7.5	7.6	7.3	8.3	8.0
25	7.8	7.6	7.3	7.1	7.6	7.5	7.7	7.4	7.5	7.2	8.4	8.0
26	7.9	7.7	7.9	7.2	7.7	7.6	7.7	7.5	7.5	7.3	---	---
27	7.8	7.7	7.9	7.6	7.6	7.4	7.7	7.6	7.7	7.4	---	---
28	7.7	7.7	8.2	7.7	7.7	7.4	7.7	7.5	7.8	7.5	---	---
29	7.9	7.6	8.2	7.8	9.3	7.7	7.8	7.6	7.8	7.3	---	---
30	7.7	7.6	7.8	7.5	9.5	7.6	7.8	7.6	7.6	7.3	---	---
31	---	---	7.8	7.5	---	---	7.9	7.7	7.7	7.5	---	---
MONTH	9.2	6.8	8.2	6.9	9.5	7.4	8.5	6.2	9.2	6.3	8.4	7.1
YEAR	9.5	5.1										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.3	2.2	4.3	2.2	7.7	6.8	---	---	10.9	10.0	---	---
2	4.4	2.1	4.1	2.2	7.8	3.5	---	---	10.3	9.6	---	---
3	3.5	1.8	4.4	1.9	7.9	2.9	9.7	9.0	9.6	8.3	13.0	11.8
4	3.4	1.3	5.0	3.1	6.6	3.4	9.8	9.3	10.8	9.2	13.6	13.0
5	3.2	1.3	5.5	3.5	6.1	5.3	10.5	9.7	10.8	10.2	13.6	13.0
6	4.8	1.1	4.4	3.6	6.4	3.5	11.0	10.4	10.3	10.0	13.6	12.7
7	5.5	2.4	5.3	3.0	6.9	4.9	11.3	10.9	10.3	9.7	12.9	11.9
8	4.1	2.6	6.5	4.2	5.0	3.7	---	---	9.9	9.4	12.3	11.6
9	2.7	1.0	5.9	4.9	6.2	5.0	---	---	9.7	8.9	12.9	11.9
10	3.0	1.6	5.2	3.5	6.8	5.8	12.6	12.1	9.4	8.7	13.3	12.2
11	4.2	2.2	5.1	3.7	7.2	5.8	12.7	12.1	8.8	7.6	12.8	11.7
12	5.5	2.8	4.4	3.2	7.6	7.2	13.0	12.6	7.9	6.9	11.7	10.8
13	6.0	2.9	6.6	2.3	8.5	5.3	13.2	12.1	10.2	6.8	10.8	9.1
14	5.6	2.9	---	---	7.8	6.0	13.0	12.2	12.1	9.8	10.8	8.8
15	5.7	2.9	4.9	3.1	7.0	5.8	13.3	12.4	11.5	9.9	12.5	10.8
16	4.6	2.6	---	---	9.2	6.6	13.1	12.7	11.3	3.5	12.9	12.2
17	5.5	2.3	---	---	8.6	5.9	12.8	11.7	10.3	9.0	12.4	11.9
18	5.5	2.4	---	---	7.7	6.4	11.8	11.2	10.8	10.2	12.6	12.1
19	4.9	2.3	---	---	9.3	7.5	11.4	10.5	11.0	10.6	12.8	12.2
20	4.3	1.9	---	---	12.2	9.7	11.0	10.0	11.7	11.0	12.3	11.7
21	4.2	1.6	---	---	12.0	7.7	10.2	9.3	11.3	10.4	11.7	10.9
22	3.0	1.5	---	---	10.5	7.9	9.9	8.9	10.3	4.6	11.4	10.5
23	2.1	0.9	6.6	3.5	7.9	3.2	9.8	8.9	10.7	8.3	13.0	11.3
24	2.1	1.5	7.1	6.0	9.4	5.9	10.5	9.5	10.3	8.9	13.3	13.0
25	2.9	1.6	7.3	6.0	8.6	8.0	11.5	10.0	9.3	8.2	13.0	12.8
26	3.2	1.6	7.1	6.4	9.5	7.9	12.2	11.4	8.2	7.2	12.9	12.3
27	4.1	1.8	7.2	6.5	9.7	7.1	12.4	11.6	8.7	8.0	12.3	9.5
28	3.3	1.7	7.4	6.6	7.6	6.8	11.8	11.1	8.5	5.3	13.2	11.3
29	3.6	1.8	7.9	6.5	9.2	7.5	11.4	10.5	7.5	2.7	11.8	11.3
30	3.9	1.9	7.2	6.6	8.0	6.8	11.1	10.7	---	---	12.5	11.1
31	3.9	2.0	---	---	---	---	11.4	10.6	---	---	11.4	10.6
MONTH	6.0	0.9	---	---	12.2	2.9	13.3	8.9	12.1	2.7	13.6	8.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.9	10.2	8.9	8.3	6.6	5.0	6.2	3.5	4.6	3.4	4.5	3.1
2	11.1	10.3	8.5	7.3	6.5	5.3	4.9	1.7	4.6	3.0	4.6	2.9
3	13.1	10.2	7.9	6.1	6.8	5.2	4.8	2.1	4.6	2.8	3.8	3.3
4	11.6	9.7	7.0	6.0	5.9	4.9	6.9	1.7	4.5	2.7	4.6	3.7
5	11.7	9.5	7.3	6.2	7.2	5.9	7.2	6.6	5.0	2.3	4.6	3.6
6	10.1	8.5	6.6	5.8	5.9	4.1	7.1	6.6	4.5	2.8	4.3	3.4
7	9.1	6.3	6.6	5.2	5.9	3.6	6.6	4.9	4.4	2.3	3.7	2.8
8	9.7	9.0	6.2	4.4	4.7	3.4	5.8	4.8	5.9	3.3	3.8	2.0
9	10.4	9.7	8.1	5.8	5.3	3.3	4.9	3.9	5.7	1.9	5.1	3.1
10	12.4	10.4	8.8	8.1	5.7	1.7	4.5	3.3	5.7	3.7	5.0	3.3
11	11.8	10.8	8.8	8.6	4.5	3.3	4.4	3.2	6.0	4.0	5.0	3.6
12	10.9	9.5	9.2	8.7	4.8	3.5	4.3	2.6	4.9	3.4	4.5	3.4
13	10.0	8.3	8.9	7.9	4.3	2.2	3.6	2.5	5.3	3.0	5.4	4.0
14	8.4	7.3	8.6	7.9	4.3	3.3	3.8	2.5	6.6	3.0	4.7	3.7
15	9.1	8.3	---	---	5.3	3.0	3.5	2.1	5.2	3.3	4.4	2.7
16	9.1	7.5	7.9	6.2	5.8	4.8	3.6	2.4	5.1	3.1	6.4	4.3
17	---	---	8.3	7.6	6.1	4.6	6.3	3.3	5.2	3.0	6.4	5.6
18	---	---	8.2	7.9	7.4	5.1	6.3	5.6	3.8	3.2	5.8	4.1
19	---	---	8.1	7.7	6.8	4.9	6.0	5.0	5.2	3.9	4.3	3.4
20	---	---	7.6	7.3	4.7	1.8	5.5	4.8	5.3	5.0	4.3	2.0
21	9.4	9.2	7.2	6.2	4.2	3.1	4.8	3.5	5.1	4.3	4.3	3.5
22	10.0	9.2	6.5	5.0	4.2	3.5	3.4	2.5	4.3	3.5	4.7	2.7
23	9.9	9.4	6.2	4.7	4.5	3.9	3.7	3.0	4.5	3.3	4.5	3.7
24	10.7	9.6	6.3	4.0	4.6	4.1	3.9	3.0	5.0	4.6	4.3	2.8
25	10.5	9.5	5.9	3.5	5.1	4.2	3.2	1.9	5.2	4.4	4.5	3.8
26	9.6	9.2	7.1	4.1	6.1	4.2	3.3	1.6	4.5	3.7	4.9	2.5
27	9.6	9.3	7.8	4.7	6.3	4.1	3.6	2.1	4.3	3.7	5.3	3.9
28	9.5	9.2	8.1	4.9	6.6	5.4	3.6	2.5	4.7	4.3	6.6	5.2
29	9.4	9.1	7.6	5.0	5.7	1.8	4.2	2.8	4.3	3.6	7.0	6.2
30	9.4	9.0	5.9	4.3	5.7	4.6	4.8	3.5	4.2	3.4	7.0	5.3
31	---	---	6.0	4.4	---	---	5.6	3.6	4.1	3.6	---	---
MONTH	13.1	6.3	9.2	3.5	7.4	1.7	7.2	1.6	6.6	1.9	7.0	2.0
YEAR	13.6	0.9										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	22.0	19.5	18.0	7.0	5.5	5.5	4.5	4.0	2.5	9.5	8.0
2	24.0	22.0	20.5	19.0	7.0	5.5	5.0	4.5	5.0	3.5	9.5	6.5
3	24.0	22.0	19.0	16.0	6.5	5.0	5.0	4.0	5.0	4.0	6.5	3.5
4	24.0	22.5	16.0	14.0	7.5	5.0	5.0	2.0	4.0	1.5	3.5	2.5
5	22.5	20.5	14.0	12.5	8.5	6.5	4.5	1.5	2.5	1.0	3.0	2.5
6	21.0	19.5	13.5	12.5	9.5	6.0	3.5	2.0	3.0	2.0	3.0	1.5
7	19.5	18.0	12.5	10.5	8.5	6.0	3.0	1.0	3.0	1.5	4.5	3.0
8	18.0	16.0	10.5	8.5	8.5	8.0	3.5	2.0	2.5	1.5	4.5	3.5
9	17.5	17.0	10.5	9.0	9.5	8.5	4.0	3.5	3.0	2.0	3.5	2.5
10	17.0	15.5	11.0	10.0	11.5	9.5	4.0	3.5	3.5	2.0	4.0	2.0
11	16.0	14.0	12.5	10.0	11.5	9.5	4.0	3.5	5.0	3.0	5.5	3.0
12	17.0	14.5	13.0	11.0	9.5	8.5	3.5	3.0	6.0	3.5	7.5	5.5
13	17.5	15.5	14.0	12.5	9.5	8.5	4.0	3.0	5.5	1.0	9.0	7.5
14	19.5	17.0	14.5	12.5	8.5	7.0	3.0	2.5	2.5	1.0	9.0	7.0
15	18.5	16.5	16.5	14.0	8.0	6.5	2.5	0.5	2.0	1.0	7.0	5.5
16	19.0	18.0	16.0	15.0	9.0	8.0	1.0	0.0	2.0	0.5	5.5	5.0
17	20.0	18.0	15.5	14.5	8.0	6.0	2.5	1.0	2.5	1.0	5.5	5.5
18	20.5	18.5	15.5	13.5	6.0	5.0	3.5	2.5	3.0	2.0	6.0	5.0
19	20.0	18.0	15.5	13.5	5.0	4.5	4.5	3.5	2.5	1.0	6.5	5.0
20	20.5	18.0	13.5	11.5	6.0	5.0	5.0	3.5	1.5	0.5	7.5	6.0
21	21.0	19.0	11.5	9.0	6.0	5.5	5.0	4.0	3.0	1.0	9.0	7.0
22	20.5	20.0	9.0	7.5	6.0	5.5	6.0	4.5	3.5	2.5	9.0	7.5
23	20.5	20.0	8.5	6.5	6.0	5.0	6.0	5.5	3.0	2.5	7.5	4.5
24	20.0	19.0	9.0	7.5	7.0	6.0	6.0	5.0	4.0	3.0	5.0	4.0
25	19.0	18.0	9.5	7.5	7.0	6.0	6.0	3.5	5.0	3.5	5.5	4.5
26	19.0	17.5	9.0	7.5	---	---	3.5	2.5	5.5	4.5	6.5	4.0
27	19.5	17.5	9.0	8.5	---	---	3.0	2.0	6.0	4.0	7.0	6.0
28	19.5	18.0	9.0	8.0	9.5	7.0	3.0	1.5	7.0	5.0	8.5	6.0
29	19.5	17.5	9.0	7.5	7.0	6.0	3.0	2.0	9.0	6.5	7.5	6.5
30	19.5	17.5	8.5	6.0	9.0	7.0	3.0	1.0	---	---	8.0	6.0
31	20.0	18.0	---	---	8.0	5.5	2.5	0.5	---	---	8.5	6.5
MONTH	25.0	14.0	20.5	6.0	11.5	4.5	6.0	0.0	9.0	0.5	9.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	16.0	14.5	19.0	16.0	25.0	21.0	24.5	23.0	25.0	22.5
2	8.0	6.5	17.0	15.0	21.0	17.5	24.5	23.5	25.0	23.0	24.5	23.0
3	9.0	6.0	18.0	16.0	22.0	19.5	23.5	22.0	25.0	23.5	23.5	21.0
4	10.0	8.0	16.5	16.0	23.5	20.5	22.5	21.5	25.0	23.0	22.0	20.5
5	11.5	7.5	18.0	14.5	---	---	22.0	20.5	24.5	21.5	22.0	19.5
6	13.5	10.0	19.0	16.0	22.5	21.5	21.5	20.0	23.0	21.0	22.0	19.5
7	12.5	5.5	19.5	17.0	23.5	20.5	21.5	20.0	23.5	22.0	22.5	20.0
8	5.5	3.5	19.0	17.0	23.0	21.0	22.0	20.0	22.5	21.5	22.0	21.0
9	6.5	4.0	17.5	13.5	23.5	21.5	22.5	21.0	22.0	20.5	22.5	20.5
10	7.0	5.0	14.0	12.0	22.5	20.0	22.0	21.5	22.5	19.0	21.5	19.0
11	8.5	6.5	14.5	13.5	21.5	18.5	24.5	21.5	23.5	20.0	22.0	20.0
12	11.0	8.5	15.5	13.5	21.5	18.5	24.5	23.0	23.0	22.0	22.0	21.0
13	14.0	10.0	15.0	15.0	21.0	20.5	25.5	23.0	25.5	22.0	23.0	21.0
14	13.0	12.0	15.5	15.0	24.0	20.5	27.0	24.0	26.0	23.0	23.5	22.5
15	13.0	11.5	15.5	15.0	24.0	23.0	26.0	24.0	26.0	24.0	23.0	21.0
16	14.5	12.0	16.0	15.5	24.0	22.0	24.5	23.5	25.5	22.5	22.0	20.5
17	15.0	14.0	17.0	15.0	24.0	21.5	24.0	23.0	26.0	24.0	22.5	20.5
18	16.5	14.0	18.0	15.5	24.0	21.5	25.0	24.0	25.0	23.0	22.5	21.5
19	16.0	15.5	19.0	17.0	25.0	22.5	25.5	24.5	23.0	22.0	23.0	22.0
20	15.5	12.5	19.0	18.5	24.5	23.5	26.5	24.5	23.0	22.0	22.5	21.0
21	12.5	10.5	21.0	18.5	23.5	21.0	28.0	25.5	24.5	22.0	22.5	20.5
22	11.0	10.5	21.5	19.5	21.0	18.5	28.0	26.0	24.5	23.0	22.0	20.5
23	12.5	11.0	23.0	20.0	18.5	16.5	29.0	26.5	24.0	22.5	20.5	19.0
24	12.5	11.5	24.0	20.5	17.0	16.5	29.0	27.0	23.0	22.5	20.5	19.5
25	13.0	11.5	24.5	21.5	18.5	16.5	28.0	26.0	23.5	22.0	20.5	18.5
26	13.5	11.0	23.5	21.5	20.5	17.0	26.5	25.0	24.5	23.0	20.5	19.5
27	13.5	12.5	22.5	20.5	22.5	19.5	26.0	25.0	24.0	23.0	20.0	19.5
28	13.5	12.5	22.5	20.0	---	---	25.5	24.0	24.0	22.0	19.5	18.0
29	14.0	13.0	22.0	20.5	23.0	22.0	24.5	23.0	24.5	22.0	18.5	18.0
30	14.5	13.5	21.0	20.0	22.0	21.5	24.5	22.0	24.5	22.5	18.0	15.0
31	---	---	19.5	17.5	---	---	25.0	22.0	24.5	22.0	---	---
MONTH	16.5	3.5	24.5	12.0	25.0	16.0	29.0	20.0	26.0	19.0	25.0	15.0
YEAR	29.0	0.0										

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, at gaging station on right bank at north end of Chillicothe, 1,400 ft downstream from Bridge Street Bridge on U.S. Highway 23, 7.4 miles upstream from Paint Creek, and 15.4 miles downstream from Deer Creek.

DRAINAGE AREA.--3,849 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951, May 1965 to September 1972.
Water temperatures: October 1950 to September 1951, May 1965 to September 1972.

EXTREMES.--Period of record:
Specific conductance (1950-51, 1965-66, 1968-71): Maximum, 1,040 micromhos Feb 9, 1966; minimum, 220 micromhos Aug. 10, 1969.
Dissolved oxygen (1965-67): Maximum, 15.0 mg/l on several days during June 1966, June and July 1967; minimum, 0.0 mg/l Apr. 27, Aug. 12, Sept. 22, 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
04...	0950	824	242	0	90	32	.6	2.0
22...	1510	--	--	--	--	--	--	--
28...	0955	630	252	0	130	47	1.0	3.3
NOV.								
24...	0930	620	226	8	140	57	.9	4.4
30...	1000	836	242	8	120	48	.8	3.2
DEC.								
16...	1035	6300	202	8	83	30	.4	2.9
27...	1030	1760	250	8	110	34	.4	3.3
JAN.								
25...	1400	2800	254	0	98	40	.5	5.1
FEB.								
10...	1045	1000	278	0	100	64	.4	3.2
18...	1010	5460	198	0	86	39	.4	3.0
MAR.								
02...	1030	2770	256	8	99	47	.4	4.8
24...	1320	12900	163	0	79	24	.3	7.9
APR.								
12...	1430	7160	160	5	79	53	.7	6.7
28...	1800	9070	152	0	58	39	.7	4.7
MAY								
10...	1100	18800	146	0	52	34	.6	4.0
30...	1035	1650	270	0	92	62	1.2	4.1
JUNE								
06...	1300	--	--	--	--	--	--	--
14...	--	1780	230	5	89	60	1.0	3.9
26...	1530	1160	248	9	110	74	1.3	4.7
JULY								
05...	1045	6300	180	4	93	30	.4	5.0
19...	1450	5160	162	4	73	27	.4	5.6
AUG.								
18...	1025	640	226	14	110	38	.7	3.2
22...	1030	2370	168	0	66	25	.3	2.6
SEP.								
06...	1020	770	252	0	110	40	.8	2.8
28...	1145	3420	152	0	64	23	.4	2.2

EXTREMES.--Period of record--Continued
Water temperatures (1950-51, 1953-71): Maximum, 32.0°C July 14, 1954, Aug. 2, 3, 1955; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since May 1965. Maximum recorded specific conductance value of 1,100 micromhos occurred Feb 6, 1972. Minimum recorded specific conductance value of 150 micromhos occurred June 29, 1972. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. Prior to June 1971, sampling site was at center of Bridge Street Bridge on U.S. Highway 23, 1,400 ft upstream from gaging station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
04...	9.0	380	290	91	653	--	--
22...	--	--	--	--	--	<.5	8.0
28...	15	502	320	110	830	--	--
NOV.							
24...	20	550	330	130	884	--	--
30...	14	502	320	110	798	--	--
DEC.							
16...	13	374	290	110	610	--	--
27...	15	456	340	120	722	--	--
JAN.							
25...	23	464	350	140	714	--	--
FEB.							
10...	14	544	360	130	824	--	--
18...	13	394	290	130	616	--	--
MAR.							
02...	21	412	310	86	678	--	--
24...	35	338	250	120	533	--	--
APR.							
12...	30	304	240	100	502	--	--
28...	21	262	200	76	430	--	--
MAY							
10...	18	238	190	70	406	--	--
30...	18	418	330	110	675	--	--
JUNE							
06...	--	--	--	--	--	<.5	8.0
14...	17	388	300	100	629	--	--
26...	21	454	350	130	737	--	--
JULY							
05...	22	376	280	120	603	--	--
19...	25	336	240	100	533	--	--
AUG.							
18...	14	464	320	110	732	--	--
22...	11	292	210	72	467	--	--
SEP.							
06...	12	464	320	110	737	--	--
28...	9.5	276	200	76	458	--	--

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	660	640	790	760	790	740	---	---	790	700	700	660
2	650	640	810	750	770	710	---	---	800	730	690	610
3	660	640	830	810	750	690	---	---	910	730	---	---
4	690	650	830	810	770	710	---	---	800	740	---	---
5	700	680	820	810	790	730	---	---	810	770	---	---
6	700	690	820	730	740	660	---	---	1100	760	---	---
7	710	700	820	800	660	550	---	---	810	750	---	---
8	710	700	830	820	620	540	---	---	830	790	---	---
9	700	650	830	810	590	540	---	---	810	760	---	---
10	700	580	830	810	640	580	---	---	890	790	---	---
11	740	690	830	820	630	620	---	---	1050	810	---	---
12	770	740	840	810	---	---	---	---	980	810	---	---
13	840	770	810	760	---	---	---	---	1030	700	---	---
14	870	780	760	750	720	620	---	---	750	630	---	---
15	880	840	780	760	740	620	---	---	690	600	660	620
16	840	690	800	780	700	580	---	---	640	600	650	570
17	790	760	800	790	610	560	---	---	---	---	610	590
18	820	790	840	790	---	---	---	---	---	---	605	580
19	840	820	900	820	---	---	---	---	---	---	600	560
20	820	770	930	860	---	---	---	---	---	---	600	570
21	770	760	920	840	740	650	---	---	---	---	610	590
22	780	740	910	840	710	600	---	---	---	---	640	590
23	780	750	950	850	720	620	---	---	---	---	640	590
24	770	730	910	880	730	630	---	---	---	---	580	530
25	800	770	---	---	730	660	---	---	700	650	600	550
26	810	790	---	---	740	650	---	---	720	680	---	---
27	830	810	---	---	740	620	---	---	720	690	---	---
28	830	800	---	---	720	640	---	---	710	680	---	---
29	800	770	800	720	720	640	---	---	700	660	---	---
30	770	750	850	790	700	570	---	---	---	---	---	---
31	760	750	---	---	670	510	---	---	---	---	---	---
MONTH	880	580	950	720	790	510	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	445	415	645	590	760	640	680	640	660	370
2	---	---	535	445	640	580	740	715	680	650	690	650
3	---	---	615	525	680	640	730	600	700	650	670	250
4	---	---	620	600	680	650	730	650	680	540	700	640
5	---	---	650	610	675	640	650	570	720	660	720	680
6	---	---	665	635	695	630	650	570	745	700	720	690
7	---	---	660	650	670	630	650	605	720	640	710	670
8	---	---	680	540	680	650	620	590	685	630	690	655
9	---	---	670	420	690	655	---	---	735	660	670	640
10	---	---	420	380	695	680	---	---	730	600	680	645
11	---	---	450	380	---	---	---	---	610	590	715	655
12	570	425	490	450	---	---	---	---	685	600	740	580
13	---	---	460	445	---	---	---	---	680	630	720	605
14	---	---	460	440	630	605	---	---	680	610	740	600
15	---	---	460	420	660	560	---	---	690	660	695	610
16	---	---	490	440	655	555	---	---	710	670	720	600
17	---	---	510	450	570	540	---	---	750	670	745	540
18	---	---	520	495	620	540	---	---	750	690	540	480
19	---	---	495	440	650	595	555	520	725	370	570	525
20	510	485	495	440	650	625	520	465	370	290	585	560
21	510	450	550	485	650	625	480	430	400	300	630	580
22	450	400	590	530	700	630	530	460	480	390	640	620
23	425	405	630	560	720	690	580	510	530	470	655	560
24	405	380	660	585	740	705	600	540	535	370	665	540
25	395	380	670	610	750	715	630	570	380	340	670	630
26	405	390	670	650	750	720	620	590	410	380	690	590
27	430	400	695	660	770	730	620	570	460	405	620	410
28	450	420	690	660	760	740	620	590	535	455	460	410
29	445	430	710	610	755	150	645	620	580	520	520	380
30	435	420	700	600	725	660	660	630	595	550	520	460
31	---	---	690	640	---	---	670	640	620	590	---	---
MONTH	---	---	710	380	770	150	---	---	750	290	745	250

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.7	---	---	7.6	7.4	---	---	8.0	7.7	7.6	7.3
2	8.1	7.8	---	---	7.7	7.4	---	---	7.9	7.7	7.5	7.4
3	8.0	7.8	7.8	7.5	7.8	7.5	---	---	7.9	7.7	---	---
4	8.1	7.8	7.7	7.4	7.8	7.5	---	---	8.1	7.7	---	---
5	8.0	7.7	7.6	7.4	7.7	7.4	---	---	8.0	7.7	---	---
6	7.9	7.7	7.6	7.4	7.6	7.4	---	---	8.0	7.7	---	---
7	7.9	7.7	7.5	7.4	7.6	7.3	---	---	8.0	7.7	---	---
8	8.0	7.7	7.5	7.3	7.6	7.3	---	---	8.1	7.8	---	---
9	7.8	7.6	7.5	7.2	7.7	7.5	---	---	8.0	7.8	---	---
10	7.8	7.7	7.4	7.2	7.8	7.5	---	---	8.1	7.8	---	---
11	7.9	7.7	7.4	7.1	7.7	7.6	---	---	7.9	7.7	---	---
12	7.9	7.7	7.5	7.1	---	---	---	---	7.8	7.7	---	---
13	7.9	7.7	7.3	7.1	---	---	---	---	7.9	7.7	---	---
14	7.9	7.7	7.4	7.0	8.0	7.6	---	---	7.9	7.6	---	---
15	7.8	7.6	7.4	7.0	7.8	7.5	---	---	7.9	7.6	7.9	7.7
16	7.7	7.6	7.3	7.0	7.6	7.5	---	---	7.9	7.9	8.2	7.8
17	7.7	7.6	7.3	7.1	---	---	---	---	---	---	8.0	7.8
18	7.8	7.5	7.6	7.0	---	---	---	---	---	---	8.0	7.9
19	7.8	7.7	7.4	7.2	---	---	---	---	---	---	8.0	7.9
20	7.9	7.5	7.4	7.3	---	---	---	---	---	---	8.1	7.9
21	8.2	7.7	7.5	7.3	7.9	7.7	---	---	---	---	8.2	7.8
22	8.0	7.5	7.5	7.4	8.0	7.7	---	---	---	---	8.0	7.8
23	8.4	7.9	7.6	7.4	7.9	7.7	---	---	---	---	8.0	7.9
24	---	---	7.5	7.4	7.9	7.7	---	---	---	---	8.0	8.0
25	---	---	---	---	7.9	7.7	---	---	7.6	7.4	---	8.0
26	---	---	---	---	7.7	7.6	---	---	7.7	7.4	---	---
27	---	---	---	---	7.9	7.6	---	---	7.6	7.4	---	---
28	---	---	---	---	7.9	7.6	---	---	7.6	7.3	---	---
29	---	---	7.7	7.4	7.9	7.7	---	---	7.6	7.3	---	---
30	---	---	7.6	7.4	7.9	7.6	---	---	---	---	---	---
31	---	---	---	---	7.8	7.5	---	---	---	---	---	---
MONTH	---	---	7.8	7.0	8.0	7.3	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.3	7.7	7.8	7.3	7.4	7.3	7.3	7.2	7.4	7.4
2	---	---	8.9	7.7	7.6	7.3	7.4	7.4	7.3	7.2	7.4	7.3
3	---	---	8.3	7.7	7.7	7.3	7.4	7.4	7.3	7.2	7.3	7.2
4	---	---	8.1	7.7	7.7	7.2	7.3	7.2	7.3	7.2	7.3	7.2
5	---	---	8.0	7.7	7.6	7.3	7.2	7.2	7.2	7.1	7.3	7.2
6	---	---	7.7	7.5	10.4	7.2	7.2	7.1	7.2	7.1	7.3	7.2
7	---	---	7.6	7.5	7.7	7.3	7.2	7.1	7.3	7.2	7.3	7.2
8	---	---	8.5	7.4	7.5	7.3	7.2	7.1	7.2	7.1	7.3	7.2
9	---	---	9.6	7.4	7.4	7.3	---	---	7.2	7.1	7.3	7.2
10	---	---	7.7	7.4	7.4	7.2	---	---	7.2	7.1	7.3	7.2
11	---	---	7.4	7.3	---	---	---	---	7.2	7.1	7.3	7.2
12	8.3	7.7	7.4	7.3	---	---	---	---	7.2	7.1	7.3	7.3
13	---	---	7.3	7.2	---	---	---	---	7.3	7.2	7.3	7.2
14	---	---	7.7	7.3	7.4	7.2	---	---	7.3	7.2	7.3	7.2
15	---	---	7.4	7.2	7.6	7.2	---	---	7.3	7.2	7.3	7.2
16	---	---	8.3	7.2	7.4	7.2	---	---	7.3	7.2	7.2	7.2
17	---	---	7.8	7.4	7.6	7.2	---	---	7.3	7.2	7.2	7.1
18	---	---	7.4	7.3	7.7	7.3	---	---	7.3	7.2	7.2	7.2
19	---	---	7.4	7.3	7.7	7.3	7.5	7.4	7.3	7.2	7.4	7.2
20	7.9	7.8	7.3	7.2	7.7	7.4	7.5	7.4	7.3	7.2	7.4	7.4
21	7.8	7.8	7.2	7.1	7.8	7.4	7.5	7.3	7.3	7.2	7.4	7.3
22	7.8	7.8	8.0	7.2	7.5	6.5	7.4	7.3	7.3	7.2	7.5	7.3
23	7.8	7.7	7.6	7.3	7.4	6.5	7.4	7.3	7.3	7.2	7.6	7.4
24	7.7	7.6	7.6	7.2	7.4	7.3	7.4	7.3	7.3	7.2	7.4	7.3
25	7.7	7.6	7.6	7.2	7.3	7.3	7.4	7.3	7.2	7.2	7.5	7.2
26	7.8	7.7	7.8	7.3	7.4	7.3	7.5	7.4	7.2	7.2	7.6	7.2
27	7.9	7.8	7.9	7.4	7.4	7.3	7.5	7.4	7.2	7.1	7.6	7.1
28	8.1	7.8	8.1	7.4	7.4	7.4	7.5	7.4	7.3	7.2	7.4	7.1
29	8.4	7.7	8.1	7.5	7.4	7.4	7.4	7.3	7.3	7.2	7.6	7.1
30	8.5	7.7	8.3	7.6	7.4	7.3	7.3	7.2	7.4	7.3	7.5	7.3
31	---	---	7.9	7.4	---	---	7.2	7.1	7.5	7.3	---	---
MONTH	---	---	9.6	7.1	10.4	6.5	---	---	7.5	7.1	7.6	7.1

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.2	3.4	6.0	4.2	7.4	6.0	---	---	10.3	9.8	9.3	8.4
2	7.3	4.9	6.4	4.0	8.6	6.8	---	---	9.8	9.4	8.4	7.9
3	6.7	4.6	6.5	4.4	9.4	7.6	---	---	9.5	8.8	---	---
4	6.2	3.7	6.9	4.7	9.6	8.0	---	---	9.8	8.8	---	---
5	6.5	4.0	7.2	5.4	9.1	6.8	---	---	9.6	8.9	---	---
6	6.2	4.1	7.0	5.5	7.5	6.3	---	---	10.2	8.9	---	---
7	5.6	3.9	7.5	5.6	7.6	5.1	---	---	10.2	9.7	---	---
8	6.6	4.2	8.0	6.6	6.9	5.2	---	---	10.3	9.8	---	---
9	5.1	4.1	8.7	7.0	9.1	---	---	---	10.5	9.9	---	---
10	5.4	4.1	8.4	6.8	8.6	8.0	---	---	10.2	9.7	---	---
11	5.1	4.2	8.4	6.8	8.2	7.9	---	---	10.2	9.3	---	---
12	5.2	4.4	8.4	6.5	---	---	---	---	9.4	8.9	---	---
13	7.1	4.2	7.8	6.1	---	---	---	---	9.9	8.9	---	---
14	5.0	3.9	7.5	5.6	9.1	8.5	---	---	9.5	8.0	---	---
15	4.5	3.7	7.4	5.0	8.9	7.6	---	---	9.5	8.5	9.6	8.1
16	4.1	3.2	6.9	4.7	8.0	7.4	---	---	9.4	8.8	10.6	9.6
17	4.4	3.4	---	---	7.8	7.3	---	---	---	---	10.8	10.2
18	4.7	3.1	---	---	---	---	---	---	---	---	10.9	10.6
19	4.7	3.5	---	---	---	---	---	---	---	---	11.0	10.9
20	5.8	3.7	---	---	---	---	---	---	---	---	10.9	10.3
21	7.6	3.9	---	---	10.1	9.7	---	---	---	---	10.3	9.2
22	4.7	2.9	---	---	9.8	9.5	---	---	---	---	9.2	8.4
23	3.9	2.9	---	---	10.0	9.4	---	---	---	---	8.5	8.0
24	3.4	2.7	---	---	9.9	9.5	---	---	---	---	9.5	8.2
25	3.2	2.6	---	---	9.5	9.2	---	---	11.5	11.1	9.5	7.4
26	3.6	2.5	---	---	9.3	8.5	---	---	11.1	10.5	---	---
27	3.8	2.6	---	---	8.6	7.9	---	---	10.7	10.2	---	---
28	4.2	2.6	---	---	8.0	7.7	---	---	10.3	9.6	---	---
29	4.7	2.8	7.2	5.9	8.3	7.8	---	---	9.9	9.2	---	---
30	5.3	3.4	7.0	5.8	8.5	7.8	---	---	---	---	---	---
31	6.4	3.7	---	---	8.6	6.0	---	---	---	---	---	---
MONTH	7.6	2.5	---	---	10.1	5.1	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.4	8.8	4.7	2.7	5.3	3.0	7.8	3.6	5.7	4.4
2	---	---	8.8	7.8	6.2	4.5	5.0	2.8	8.2	4.7	4.8	3.6
3	---	---	7.8	6.8	7.8	5.3	6.3	3.1	10.9	4.7	6.5	3.6
4	---	---	7.0	5.8	6.8	4.0	3.1	1.9	9.1	5.8	4.2	3.5
5	---	---	6.4	5.9	5.4	3.8	4.6	0.1	8.9	4.3	4.5	3.1
6	---	---	6.1	5.5	4.8	3.9	5.5	4.6	8.7	3.4	5.2	3.2
7	---	---	6.3	5.2	5.1	4.0	5.3	4.7	8.3	4.2	6.1	3.5
8	---	---	5.4	4.6	5.4	4.2	4.7	4.4	6.0	3.3	5.7	3.9
9	---	---	6.7	3.6	5.4	3.5	---	---	6.5	2.7	7.8	4.2
10	---	---	---	---	6.3	3.5	---	---	7.3	3.0	8.6	4.7
11	---	---	---	---	---	---	---	---	10.6	4.5	8.6	4.3
12	11.3	8.4	---	---	---	---	---	---	8.1	5.0	5.7	3.7
13	---	---	---	---	---	---	---	---	8.7	4.7	3.7	2.7
14	---	---	---	---	4.0	3.3	---	---	8.0	4.9	3.5	2.5
15	---	---	---	---	3.8	2.8	---	---	6.1	4.1	4.0	2.4
16	---	---	---	---	3.4	2.0	---	---	6.8	3.7	4.3	2.4
17	---	---	5.5	4.9	4.5	2.8	---	---	6.0	3.0	3.9	2.1
18	---	---	---	---	5.2	4.5	---	---	6.5	2.9	4.3	3.9
19	---	---	---	---	6.6	4.8	2.8	2.6	3.4	0.8	5.0	4.2
20	9.1	7.1	---	---	5.6	5.0	3.1	2.8	3.5	1.8	5.5	4.6
21	8.5	6.0	---	---	5.5	4.9	3.9	3.1	3.8	3.5	5.4	4.3
22	7.5	4.7	5.1	5.0	5.2	4.1	3.9	3.6	4.1	3.8	5.3	4.0
23	7.5	6.0	5.0	4.5	5.4	4.0	4.4	3.5	4.2	3.4	5.1	4.0
24	7.5	6.2	4.6	3.5	5.9	4.8	4.6	3.4	3.4	2.4	4.9	4.1
25	9.0	6.5	6.0	4.6	6.6	5.0	4.9	3.6	3.7	2.9	4.3	3.4
26	10.0	8.2	9.1	4.5	7.7	4.9	5.9	3.9	3.8	3.5	4.3	3.3
27	10.5	8.2	10.1	5.6	10.2	4.8	5.3	3.8	3.9	3.6	4.1	2.6
28	10.2	9.6	11.2	5.3	10.4	4.9	3.9	2.6	4.0	3.5	4.2	3.8
29	9.8	9.6	9.8	5.8	10.4	4.1	3.9	2.1	3.9	3.5	5.1	3.5
30	9.6	9.3	6.4	4.5	7.8	3.3	4.3	2.6	5.1	3.8	5.7	5.1
31	---	---	4.5	3.0	---	---	5.9	3.1	5.5	4.3	---	---
MONTH	---	---	---	---	10.4	2.0	---	---	10.9	0.8	8.6	2.1

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	22.0	18.5	17.0	6.0	5.0	---	---	2.0	1.5	10.5	8.0
2	23.5	22.0	19.0	17.0	5.0	4.0	---	---	3.5	1.5	10.5	10.0
3	24.0	22.0	17.0	14.0	4.0	3.0	---	---	4.0	3.0	---	---
4	23.5	22.0	15.0	13.5	4.5	2.5	---	---	3.0	1.5	---	---
5	22.0	21.0	14.0	12.0	5.0	3.5	---	---	1.5	0.5	---	---
6	22.0	19.5	13.0	11.0	6.5	5.0	---	---	1.5	0.5	---	---
7	19.5	18.5	11.0	9.0	8.5	6.5	---	---	1.5	0.5	---	---
8	18.5	16.5	9.0	8.0	8.5	5.5	---	---	1.0	0.5	---	---
9	18.0	16.0	8.0	7.0	8.5	8.0	---	---	1.0	0.0	---	---
10	16.5	15.5	9.0	7.0	10.0	6.5	---	---	1.0	0.0	---	---
11	16.0	15.0	9.0	7.0	10.0	---	---	---	2.0	1.0	---	---
12	16.0	14.5	9.5	8.0	---	---	---	---	3.5	2.0	---	---
13	16.5	14.5	11.0	9.0	---	---	---	---	4.0	3.0	---	---
14	17.0	15.5	12.0	10.0	7.5	7.0	---	---	4.0	2.5	---	---
15	17.0	15.5	14.0	11.0	9.0	7.5	---	---	3.5	2.5	8.0	7.5
16	17.0	16.5	14.5	11.5	8.5	6.0	---	---	2.5	2.5	8.0	6.5
17	18.5	16.5	15.0	12.0	8.5	8.0	---	---	---	---	6.5	6.0
18	19.0	17.0	13.5	12.0	---	---	---	---	---	---	7.0	5.5
19	19.0	17.0	12.5	10.5	---	---	---	---	---	---	7.0	5.5
20	19.0	17.0	10.5	9.5	---	---	---	---	---	---	8.0	6.0
21	20.0	18.0	9.5	7.0	6.0	5.5	---	---	---	---	9.5	7.0
22	19.5	18.5	7.5	6.0	5.5	4.5	---	---	---	---	9.5	8.5
23	19.0	18.5	7.0	4.5	4.5	4.0	---	---	---	---	8.5	6.0
24	19.0	18.0	5.5	5.0	5.5	4.5	---	---	---	---	6.0	5.0
25	18.5	18.0	---	---	6.0	5.0	---	---	5.0	4.0	6.0	4.5
26	19.0	17.0	---	---	7.0	6.0	---	---	5.0	4.5	---	---
27	19.0	17.0	---	---	9.0	7.0	---	---	5.5	4.0	---	---
28	19.0	17.0	---	---	9.5	8.0	---	---	6.5	4.5	---	---
29	18.0	16.5	7.0	6.5	8.0	6.5	---	---	9.0	6.0	---	---
30	18.0	16.0	6.5	6.0	8.5	6.5	---	---	---	---	---	---
31	18.5	16.5	---	---	8.0	7.0	---	---	---	---	---	---
MONTH	24.0	14.5	19.0	4.5	10.0	2.5	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.0	13.5	18.0	16.5	23.0	19.5	25.0	23.0	24.5	23.0
2	---	---	16.0	14.5	19.0	16.5	22.0	21.0	26.0	23.5	24.0	22.5
3	---	---	17.0	15.5	20.5	18.0	23.0	21.5	26.0	23.5	23.5	20.0
4	---	---	16.0	15.0	22.0	19.5	22.0	21.5	25.5	23.0	22.0	21.0
5	---	---	16.0	14.5	23.0	20.5	21.5	20.5	26.0	21.5	22.0	20.5
6	---	---	16.0	14.0	22.0	19.5	21.0	20.0	25.0	22.0	21.5	19.5
7	---	---	16.5	15.5	21.0	18.5	20.5	19.5	25.0	22.0	22.0	19.5
8	---	---	16.5	15.5	21.0	19.0	21.0	19.5	23.5	21.5	21.0	20.5
9	---	---	16.0	14.5	20.5	19.0	---	---	23.0	21.0	23.5	19.5
10	---	---	16.0	13.5	20.0	18.5	---	---	23.0	20.5	23.5	19.0
11	---	---	15.5	12.5	---	---	---	---	24.0	20.5	23.5	19.5
12	12.0	9.5	16.0	14.0	---	---	---	---	24.0	21.0	21.5	21.0
13	---	---	18.0	15.5	---	---	---	---	26.0	21.5	23.0	20.5
14	---	---	18.0	14.5	21.5	21.0	---	---	26.0	23.0	23.5	22.0
15	---	---	21.0	17.0	22.0	21.0	---	---	25.0	23.5	23.0	21.5
16	---	---	21.0	14.5	23.0	21.5	---	---	25.5	22.0	23.0	20.5
17	---	---	15.0	14.5	22.5	21.5	---	---	26.0	24.0	23.0	21.5
18	---	---	16.0	14.5	23.0	21.0	---	---	26.5	24.0	23.0	21.5
19	---	---	17.0	16.0	24.0	21.5	25.5	24.5	25.5	23.5	23.5	21.5
20	15.5	14.0	---	---	23.0	22.5	26.0	24.5	24.0	23.0	23.0	21.0
21	17.0	13.5	---	---	22.5	21.0	26.0	24.5	24.0	22.0	22.5	20.0
22	20.5	16.0	19.5	19.0	21.0	18.0	27.0	25.5	24.5	23.0	22.0	20.5
23	20.0	18.5	20.5	19.0	18.0	16.0	28.5	26.0	25.5	23.5	21.0	19.5
24	19.0	17.0	21.0	19.5	16.0	15.5	28.5	26.5	24.5	23.5	20.5	19.5
25	17.0	11.0	22.0	20.0	18.0	15.0	27.0	25.5	24.0	23.0	21.0	20.0
26	13.0	9.0	23.5	20.5	20.5	16.0	26.0	24.5	24.5	23.0	21.0	21.0
27	13.0	11.0	23.5	20.0	22.0	18.0	26.0	24.5	24.5	23.5	21.5	21.0
28	13.5	12.0	22.5	19.5	22.0	19.5	25.0	24.0	24.5	23.0	21.0	20.0
29	13.5	13.0	23.0	19.5	21.5	19.0	24.0	23.0	24.0	22.0	20.5	19.5
30	14.5	12.0	20.0	19.5	21.5	20.0	23.5	22.0	24.0	22.0	20.0	18.0
31	---	---	19.5	18.0	---	---	24.5	22.0	24.0	22.0	---	---
MONTH	---	---	23.5	12.5	24.0	15.0	---	---	26.5	20.5	24.5	18.0

03234500 SCIOTO RIVER AT HIGBY, OHIO

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, at gaging station on left bank at downstream side of highway bridge, 0.8 mile downstream from Walnut Creek, 1.2 miles north of Higby, 3 miles west northwest of Richmondale, and 5.0 miles upstream from Salt Creek.

DRAINAGE AREA.--5,131 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1967 to September 1972.
Water temperatures: October 1953 to September 1972.
Sediment records: October 1953 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 900 micromhos Oct. 16; minimum, 200 micromhos Apr. 7.
pH: Maximum, 8.4 Nov. 2; minimum, 6.9 July 6, Sept. 16.
Water temperatures: Maximum, 30.0°C July 22; minimum, 0.5°C Jan. 31.
Sediment concentrations: Maximum daily, 2,090 mg/l Apr. 13; minimum daily, 8 mg/l Feb. 3, 4.
Sediment discharges: Maximum daily, 133,000 tons Apr. 13; minimum daily, 31 tons Nov. 10.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
04...	1115	1330	252	0	90	39	.5	2.1
22...	1200	--	--	--	--	--	--	--
27...	1510	1110	270	0	110	58	.5	2.8
NOV.								
19...	1220	865	278	0	120	55	.5	2.8
30...	1150	1550	250	10	100	49	.5	2.4
DEC.								
16...	1430	9400	216	4	74	27	.3	2.6
30...	1205	2670	254	14	92	30	.3	2.8
JAN.								
03...	1310	10200	200	0	86	31	.4	6.4
FEB.								
14...	1345	7420	168	0	71	29	.4	2.5
22...	1030	4330	242	0	89	35	.3	2.8
MAR.								
14...	1120	3950	230	0	84	28	.3	4.2
24...	1200	15800	175	0	92	25	.2	5.1
APR.								
04...	1120	1920	196	8	84	63	.6	4.0
13...	1115	21600	160	0	35	17	.6	1.3
MAY								
16...	1015	22200	166	0	54	36	.6	4.2
30...	1005	2650	241	12	87	61	.9	3.7
JUNE								
06...	1520	--	--	--	--	--	--	--
07...	1300	2480	238	12	85	73	.8	3.7
19...	1130	4350	211	8	72	57	.8	4.3
JULY								
24...	1135	2050	204	0	94	28	.4	3.7
27...	1330	1500	226	0	84	33	.3	3.9
AUG.								
18...	1130	685	252	0	110	44	.5	2.8
22...	1225	2900	154	0	65	25	.3	2.5
SEP.								
12...	1205	651	264	0	110	49	.5	2.6
18...	1155	2770	182	0	80	38	.4	2.2

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
APR. 9, 1972	1310	6.0	20900	456	25700	55	67	76	84	90	93	95	97	100	--	--
APR. 21......	1210	16.0	16100	228	9910	51	64	70	78	86	92	96	97	100	--	--

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1971-72): Maximum, 900 micromhos Oct. 16, 1971; minimum, 200 micromhos Apr. 7, 1972.
pH (1971-72): Maximum, 8.4 Nov. 2, 1971; minimum, 6.9 July 6, Sept. 16, 1972.
Water temperatures (1953-67, 1971-72): Maximum, 34.0°C June 29, 1966; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 2,260 mg/l June 26, 1971; minimum daily, 1 mg/l on several days during 1955-56.
Sediment discharges: Maximum daily, 550,000 tons Jan. 23, 1959; minimum daily, 0.82 ton Sept. 8, 1955.

REMARKS.--Continuous water-quality recorder operated since March 1967. Maximum recorded specific conductance value of 1,050 micromhos occurred on Sept. 24, 1967. Minimum recorded specific conductance value of 160 micromhos occurred on Apr. 2, 3, 1970. Maximum recorded pH of 8.8 occurred on Dec. 9, 1970. Dissolved oxygen concebtrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Flow affected by ice Feb. 7-11. Flow slightly regulated by 5 reservoirs 50 to 105 miles upstream from station, and since 1952 by Rocky Fork Lake 51 miles upstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
04...	9.1	406	290	83	675	--	--
22...	--	--	--	--	--	<.5	7.0
27...	12	480	330	110	781	--	--
NOV.							
19...	12	530	340	110	833	--	--
30...	10	484	320	98	772	--	--
DEC.							
16...	12	368	280	96	588	--	--
30...	13	446	340	110	706	--	--
JAN.							
03...	28	388	280	120	586	--	--
FEB.							
14...	11	336	230	92	512	--	--
22...	12	434	320	120	659	--	--
MAR.							
14...	18	370	300	110	624	--	--
24...	22	336	250	110	541	--	--
APR.							
04...	18	360	280	100	594	--	--
13...	5.8	206	170	39	261	--	--
MAY							
16...	18	250	210	74	434	--	--
30...	16	404	320	100	672	--	--
JUNE							
06...	--	--	--	--	--	<.5	8.0
07...	16	404	320	100	673	--	--
19...	19	348	290	100	584	--	--
JULY							
24...	16	358	280	110	568	--	--
27...	17	404	300	110	629	--	--
AUG.							
18...	12	468	320	110	742	--	--
22...	11	290	200	74	464	--	--
SEP.							
12...	12	484	340	120	769	--	--
18...	9.6	346	270	120	562	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
OCT.												
04...	1100	1	0	0	0	5	8	10	14	20	34	77
04...	1105	1	0	0	0	6	9	11	15	24	49	82

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	720	610	750	720	720	710	560	470	760	730	620	610
2	640	610	740	720	710	690	550	500	760	730	610	430
3	660	640	780	720	700	680	586	550	740	730	530	430
4	670	650	830	780	690	680	600	595	---	---	580	550
5	780	670	800	780	680	680	600	540	---	---	620	580
6	800	700	820	780	680	400	580	550	---	---	630	600
7	770	720	850	790	440	360	620	580	---	---	610	570
8	750	720	850	790	470	440	620	620	---	---	585	555
9	740	700	860	780	490	470	620	600	---	---	600	565
10	710	690	830	770	540	490	600	580	---	---	620	585
11	770	700	840	780	560	540	600	590	---	---	630	595
12	720	690	840	840	590	560	620	600	---	---	620	600
13	780	710	840	830	600	580	600	590	---	---	630	610
14	860	720	830	800	640	600	600	600	520	505	620	600
15	890	800	800	790	640	620	640	600	560	490	640	600
16	900	830	800	740	640	560	---	---	560	510	620	510
17	850	750	820	800	600	560	---	---	560	560	530	500
18	760	730	830	820	640	600	---	---	590	560	540	510
19	740	720	830	810	660	640	---	---	620	590	550	540
20	750	700	830	820	660	600	---	---	640	620	560	540
21	730	710	---	---	660	650	710	700	660	640	570	550
22	760	660	---	---	650	640	710	710	660	660	560	460
23	690	670	840	830	650	640	710	690	670	660	540	500
24	720	680	860	830	660	650	690	610	660	540	540	500
25	770	720	860	850	680	660	640	620	600	550	540	510
26	780	720	850	840	680	680	680	640	590	540	560	540
27	780	740	850	820	690	680	690	680	580	560	580	540
28	810	750	840	800	690	670	690	690	610	580	580	560
29	790	760	800	780	690	660	710	690	620	610	580	580
30	810	760	790	710	690	640	710	700	---	---	580	580
31	760	720	---	---	640	560	735	710	---	---	580	580
MONTH	900	610	860	710	720	360	735	470	---	---	640	430

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	580	580	480	340	636	592	654	624	662	651	677	666
2	580	580	500	460	615	510	665	639	662	620	694	646
3	580	580	560	500	648	615	669	665	698	605	696	687
4	590	540	570	560	646	607	674	662	698	618	687	626
5	550	520	590	580	668	625	663	582	681	656	688	658
6	570	530	600	590	691	668	582	570	---	---	716	686
7	580	200	---	---	705	672	591	570	---	---	739	716
8	490	240	---	---	---	---	570	557	---	---	742	731
9	420	320	---	---	---	---	558	549	---	---	750	730
10	500	330	---	---	---	---	552	483	---	---	754	738
11	---	---	---	---	---	---	534	462	---	---	765	742
12	---	---	475	436	---	---	566	482	---	---	780	746
13	320	260	463	436	---	---	572	497	---	---	776	731
14	380	280	480	463	671	632	549	500	---	---	---	---
15	410	370	463	434	632	593	569	548	---	---	743	712
16	420	350	463	429	593	468	563	551	---	---	712	655
17	410	350	471	438	519	459	570	561	---	---	746	656
18	490	410	486	471	593	519	576	495	---	---	657	549
19	510	430	485	455	609	593	531	491	---	---	---	---
20	540	450	464	441	615	608	519	489	---	---	600	558
21	540	420	501	464	614	611	489	465	---	---	640	600
22	470	400	578	501	650	608	504	468	495	459	673	640
23	430	420	603	578	660	645	528	485	531	495	684	673
24	430	400	614	602	669	660	591	525	614	524	696	663
25	420	360	648	614	674	666	609	591	---	---	692	682
26	430	385	663	645	672	663	620	609	---	---	704	681
27	470	430	671	662	668	654	630	617	---	---	711	571
28	490	430	677	666	660	651	635	617	---	---	571	478
29	490	460	681	669	654	617	651	633	---	---	515	478
30	480	460	683	657	654	605	656	651	---	---	541	515
31	---	---	667	628	---	---	662	620	---	---	---	---
MONTH	590	200	683	340	705	459	674	462	---	---	780	478
YEAR	900	200										

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.3	8.3	7.9	8.0	7.7	7.7	7.4	7.6	7.6	7.9	7.8
2	7.7	7.4	8.4	7.8	7.9	7.8	7.7	7.7	7.6	7.5	7.8	7.6
3	7.7	7.5	7.9	7.8	7.8	7.8	7.7	7.6	7.6	7.6	7.6	7.5
4	7.8	7.6	8.0	7.8	7.8	7.7	7.7	7.6	---	---	7.6	7.5
5	7.8	7.6	7.9	7.8	7.8	7.7	7.7	7.7	---	---	7.7	7.6
6	7.7	7.6	7.9	7.8	7.9	7.6	7.7	7.6	---	---	7.7	7.7
7	7.7	7.4	7.9	7.8	7.6	7.4	7.7	7.7	---	---	7.7	7.7
8	7.8	7.5	8.0	7.8	7.5	7.4	7.7	7.6	---	---	7.7	7.6
9	7.7	7.5	8.0	7.9	7.6	7.5	7.7	7.6	---	---	7.7	7.6
10	7.8	7.5	8.0	7.9	7.7	7.6	7.6	7.6	---	---	7.7	7.6
11	7.8	7.6	7.9	7.9	7.7	7.7	7.6	7.6	---	---	7.6	7.6
12	7.6	7.5	7.9	7.8	7.7	7.6	7.6	7.6	---	---	7.6	7.5
13	7.7	7.5	7.9	7.8	7.7	7.6	7.7	7.6	---	---	7.6	7.5
14	7.9	7.4	7.8	7.7	7.7	7.6	7.7	7.7	7.6	7.4	7.6	7.5
15	7.8	7.4	7.8	7.7	7.7	7.6	7.7	7.6	7.6	7.4	7.7	7.6
16	8.1	7.6	7.8	7.7	7.6	7.5	---	---	7.6	7.5	7.8	7.6
17	8.0	7.6	7.7	7.6	7.6	7.6	---	---	7.7	7.6	7.8	7.7
18	7.8	7.7	7.6	7.5	7.8	7.6	---	---	7.7	7.4	7.8	7.7
19	7.9	7.7	7.5	7.3	7.9	7.9	---	---	7.7	7.7	7.8	7.8
20	7.9	7.8	7.4	7.3	8.0	7.8	---	---	7.7	7.7	7.8	7.8
21	7.9	7.8	---	---	7.9	7.8	7.6	7.5	7.7	7.7	7.8	7.7
22	8.0	7.9	---	---	7.9	7.8	7.6	7.5	7.9	7.9	7.9	7.7
23	7.9	7.8	7.4	7.3	7.9	7.7	7.6	7.5	8.0	7.9	7.9	7.8
24	7.8	7.8	7.6	7.3	7.7	7.7	7.6	7.5	7.9	7.7	8.0	7.8
25	7.9	7.8	7.5	7.4	7.7	7.7	7.6	7.5	7.9	7.8	8.0	7.6
26	7.9	7.8	7.5	7.5	7.7	7.7	7.6	7.6	7.9	7.8	7.9	7.6
27	7.9	7.9	7.7	7.5	7.8	7.7	7.6	7.6	7.9	7.8	8.2	7.5
28	7.9	7.8	7.7	7.6	7.8	7.7	7.6	7.6	7.9	7.8	7.8	7.6
29	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.6	7.9	7.8	7.7	7.7
30	7.9	7.9	7.8	7.7	7.8	7.7	7.7	7.6	---	---	7.7	7.7
31	8.0	7.9	---	---	7.6	7.4	7.7	7.6	---	---	7.7	7.6
MONTH	8.1	7.3	8.4	7.3	8.0	7.4	7.7	7.4	---	---	8.2	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.6	7.7	7.2	7.4	7.3	7.2	7.1	7.4	7.3	7.5	7.5
2	7.7	7.6	7.5	7.3	7.5	7.3	7.2	7.1	7.7	7.3	7.5	7.3
3	7.7	7.6	7.5	7.2	7.7	7.4	7.3	7.1	7.7	7.5	7.5	7.3
4	7.7	7.6	7.4	7.2	7.6	7.5	7.3	7.1	7.9	7.8	7.4	7.2
5	7.7	7.6	7.6	7.5	7.5	7.3	7.1	7.1	8.1	7.7	7.4	7.3
6	7.6	7.5	7.6	7.5	7.7	7.2	7.2	6.9	---	---	7.4	7.2
7	7.6	7.3	---	---	7.4	7.3	7.4	7.2	---	---	7.3	7.2
8	8.2	7.3	---	---	---	---	7.4	7.3	---	---	7.2	7.1
9	7.8	7.4	---	---	---	---	7.5	7.4	---	---	7.2	7.1
10	7.6	7.1	---	---	---	---	7.5	7.5	---	---	7.5	7.2
11	---	---	---	---	---	---	7.6	7.4	---	---	7.5	7.2
12	---	---	7.5	7.4	---	---	7.6	7.5	---	---	7.3	7.2
13	7.3	7.2	7.4	7.3	---	---	7.6	7.4	---	---	7.3	7.2
14	7.3	7.2	7.5	7.3	7.5	7.4	7.7	7.4	---	---	---	---
15	7.3	7.1	7.5	7.4	7.4	7.2	7.7	7.5	---	---	7.1	7.0
16	7.3	7.1	7.5	7.4	7.2	7.0	7.5	7.3	---	---	7.1	6.9
17	7.2	7.0	7.5	7.4	7.4	7.0	7.3	7.3	---	---	7.1	7.0
18	7.4	7.0	7.5	7.4	7.7	7.4	7.3	7.2	---	---	7.1	7.0
19	7.3	7.0	7.5	7.4	7.8	7.5	7.4	7.2	---	---	7.1	7.0
20	7.3	7.2	7.4	7.4	7.8	7.6	7.7	7.4	---	---	7.1	7.0
21	7.5	7.2	7.5	7.3	7.6	7.5	7.4	7.2	---	---	---	---
22	7.4	7.3	7.5	7.4	7.5	7.3	7.5	7.3	7.6	7.4	7.3	7.0
23	7.4	7.2	7.5	7.4	7.4	7.1	7.5	7.3	7.7	7.4	7.3	7.0
24	7.3	7.3	7.5	7.3	7.2	7.1	7.4	7.1	7.5	7.3	7.3	7.1
25	7.6	7.3	7.5	7.3	7.1	7.0	7.4	7.1	---	---	7.1	7.0
26	7.6	7.3	7.6	7.5	7.3	7.1	7.6	7.2	---	---	7.3	7.0
27	7.5	7.3	7.9	7.5	7.5	7.3	7.8	7.1	---	---	7.4	7.2
28	7.5	7.1	7.9	7.6	7.7	7.5	7.3	7.0	---	---	7.4	7.2
29	7.2	7.1	7.9	7.5	7.7	7.5	7.0	7.0	---	---	7.5	7.3
30	7.2	7.2	7.8	7.5	7.7	7.2	7.1	7.0	---	---	7.4	7.3
31	---	---	7.5	7.4	---	---	7.4	7.0	---	---	---	---
MONTH	8.2	7.0	7.9	7.2	7.8	7.0	7.8	6.9	---	---	7.5	6.9
YEAR	8.4	6.9										

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.2	2.6	5.1	4.1	8.2	7.9	9.9	7.2	12.6	12.3	7.5	5.8
2	6.3	4.4	4.6	3.9	9.3	8.2	10.3	9.9	12.6	12.0	7.0	5.9
3	6.7	4.8	5.0	3.3	9.8	9.2	10.4	10.2	12.0	11.8	6.7	6.1
4	7.1	5.0	5.4	4.3	10.1	9.9	10.2	10.0	---	---	6.6	6.1
5	7.2	5.0	5.3	4.4	10.2	9.5	10.3	10.0	---	---	6.2	5.6
6	7.5	5.7	5.3	4.7	9.7	8.5	10.6	10.2	---	---	6.2	5.4
7	6.5	4.8	5.4	4.5	9.2	8.4	10.8	10.6	---	---	5.8	5.0
8	7.2	5.3	---	---	8.5	8.0	10.8	10.6	---	---	5.5	4.2
9	6.6	5.2	---	---	9.2	8.4	10.6	10.1	---	---	6.1	4.1
10	6.0	4.7	---	---	9.1	8.7	10.1	9.8	---	---	6.7	5.7
11	5.9	5.0	---	---	8.7	8.4	9.8	9.4	---	---	6.3	5.4
12	5.4	4.6	---	---	8.6	8.4	10.0	9.4	---	---	---	---
13	4.9	4.2	---	---	9.2	8.5	10.0	9.9	---	---	---	---
14	4.2	2.5	---	---	9.5	9.1	10.0	9.8	12.6	11.9	---	---
15	2.8	2.4	---	---	9.4	8.5	10.1	9.8	12.4	11.6	---	---
16	3.4	2.4	---	---	8.5	8.1	---	---	12.4	12.2	---	---
17	3.9	2.1	5.2	4.4	8.4	8.4	---	---	12.3	11.8	---	---
18	4.3	3.8	5.8	4.7	10.5	8.6	---	---	12.1	11.7	---	---
19	4.4	3.8	5.6	3.3	11.3	10.5	---	---	11.9	11.7	---	---
20	4.5	3.7	3.9	3.4	11.3	11.2	---	---	11.9	11.9	---	---
21	5.0	3.8	---	---	11.2	11.1	11.9	11.4	11.9	11.4	---	---
22	4.6	4.0	---	---	11.1	10.9	11.4	10.6	11.6	11.2	---	---
23	4.0	2.3	---	---	11.1	10.6	10.6	10.3	11.6	11.4	---	---
24	2.5	2.3	6.5	5.2	10.9	10.5	10.8	10.1	11.6	11.4	14.6	11.5
25	3.2	2.3	5.3	4.9	10.5	10.1	11.0	10.5	11.5	11.4	14.2	7.7
26	3.5	3.1	6.0	5.2	10.1	9.3	11.9	11.0	11.7	11.1	12.9	8.2
27	3.7	3.3	6.7	6.0	9.3	8.6	12.5	11.8	11.6	11.4	15.0	[illegible]
28	3.5	3.1	7.1	5.9	8.6	8.3	12.8	12.4	11.4	8.1	15.0	[illegible]
29	3.3	2.9	7.6	7.1	8.8	8.6	12.8	12.6	8.1	7.0	14.2	12.0
30	4.3	3.0	---	---	9.0	8.2	12.9	12.5	---	---	13.3	11.8
31	4.9	3.8	---	---	9.2	6.9	12.8	12.5	---	---	13.0	11.5
MONTH	7.5	2.1	---	---	11.3	6.9	12.9	7.2	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.1	11.8	---	---	6.3	5.5	5.3	3.5	4.3	1.9	6.0	5.4
2	12.4	11.6	---	---	7.2	5.9	4.0	2.0	4.7	2.6	5.6	3.6
3	12.5	11.4	---	---	9.6	5.9	4.6	2.6	8.8	2.5	5.2	3.2
4	12.4	11.1	---	---	9.0	6.7	4.8	1.8	6.0	2.8	4.7	2.8
5	11.9	10.4	---	---	7.3	4.9	3.1	0.0	6.3	2.2	5.1	3.6
6	11.9	10.4	---	---	6.2	4.2	5.4	2.5	---	---	5.6	3.2
7	12.0	6.0	---	---	6.0	5.5	5.2	4.2	---	---	5.4	3.7
8	12.0	8.2	---	---	---	---	5.2	4.6	---	---	4.9	3.6
9	14.0	10.4	---	---	---	---	5.2	4.3	---	---	6.3	3.2
10	13.3	4.0	---	---	---	---	4.6	3.7	---	---	7.2	3.7
11	---	---	---	---	---	---	3.8	3.2	---	---	8.0	5.3
12	---	---	8.2	7.6	---	---	5.1	2.9	---	---	7.0	3.7
13	---	---	7.7	7.2	---	---	4.6	3.0	---	---	---	---
14	---	---	7.7	6.8	5.9	4.8	5.8	3.2	---	---	---	---
15	---	---	7.4	6.8	5.1	4.1	5.3	3.3	---	---	4.5	3.1
16	---	---	7.6	7.2	4.9	4.3	3.7	2.8	---	---	4.9	2.9
17	---	---	7.4	7.1	5.7	5.2	3.8	2.5	---	---	4.7	2.9
18	---	---	7.5	6.7	6.0	5.4	4.1	2.7	---	---	4.2	3.2
19	---	---	6.8	6.4	6.6	4.6	4.9	4.1	---	---	4.3	3.8
20	---	---	6.7	6.2	5.9	5.3	5.1	4.3	---	---	4.8	4.2
21	---	---	6.3	5.9	5.7	4.7	4.6	3.6	---	---	5.3	4.6
22	---	---	6.1	5.6	7.6	5.1	4.1	3.7	4.0	2.8	5.4	4.7
23	---	---	6.4	5.8	7.4	6.5	4.7	3.7	4.5	3.2	5.9	5.1
24	---	---	6.9	6.0	7.0	6.5	7.4	4.3	6.6	2.3	5.8	5.0
25	---	---	7.3	5.1	7.8	6.3	6.9	4.6	---	---	5.5	4.8
26	---	---	9.7	7.1	8.5	5.8	7.1	4.8	---	---	6.9	4.6
27	---	---	13.2	7.4	10.5	5.9	6.0	4.5	---	---	6.7	6.0
28	---	---	13.9	8.4	10.5	6.6	5.0	2.4	---	---	7.6	5.9
29	---	---	12.4	8.3	9.7	6.3	2.4	1.4	---	---	7.3	6.4
30	---	---	9.2	6.6	6.6	5.1	3.0	1.6	---	---	8.2	7.3
31	---	---	7.7	6.0	---	---	3.7	1.5	---	---	---	---
MONTH	---	---	---	---	10.5	4.1	7.4	0.0	---	---	8.2	2.8

03224500 SCIOTO RIVER AT HIGBY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	23.0	18.5	18.0	5.0	4.5	7.0	5.0	3.0	1.5	9.5	8.0
2	24.0	23.0	19.0	18.5	5.0	4.0	5.0	4.0	3.0	1.5	10.0	6.5
3	24.0	23.0	18.5	15.5	4.0	3.0	4.5	4.0	3.5	3.0	6.5	5.5
4	24.0	23.0	15.5	13.5	4.0	3.0	4.5	4.5	---	---	5.5	4.5
5	23.5	21.5	13.5	12.0	4.5	4.0	4.5	3.5	---	---	4.5	3.0
6	22.0	20.5	12.5	11.5	6.0	4.5	3.5	2.5	---	---	4.0	3.0
7	20.5	19.0	11.5	9.0	8.0	6.0	3.0	2.0	---	---	5.5	3.5
8	19.0	17.0	9.0	7.0	8.5	8.0	3.0	2.0	---	---	5.5	4.5
9	18.0	16.5	8.0	7.5	8.0	7.5	3.5	2.5	---	---	4.5	3.5
10	16.5	15.5	8.0	7.0	9.5	8.0	5.0	3.5	---	---	5.0	3.5
11	16.0	15.0	8.5	7.5	9.5	8.5	5.0	5.0	---	---	6.0	4.0
12	16.0	15.0	9.0	8.5	8.5	7.0	5.0	4.5	---	---	7.5	5.5
13	16.5	15.0	10.5	9.0	8.0	6.5	5.5	4.5	---	---	9.5	7.0
14	17.0	16.0	11.0	10.0	6.5	6.0	4.5	3.5	3.0	2.0	9.0	7.0
15	17.0	16.5	13.0	11.0	8.5	6.5	3.5	1.0	2.5	2.0	7.0	6.5
16	18.0	17.0	13.5	12.5	8.5	8.0	---	---	2.0	1.5	7.0	6.0
17	18.5	17.0	13.0	11.0	8.0	6.5	---	---	2.5	1.5	6.0	5.5
18	19.0	18.0	13.5	12.0	6.5	4.5	---	---	3.0	2.0	6.0	5.0
19	19.0	18.0	13.5	11.0	4.5	3.5	---	---	3.0	1.5	6.5	5.0
20	19.0	18.0	11.0	9.5	4.5	4.0	---	---	1.5	1.0	7.5	5.5
21	19.5	18.5	---	---	5.0	4.5	5.0	4.5	2.0	1.0	9.5	6.5
22	19.5	19.0	---	---	4.5	4.0	6.0	4.5	4.0	3.0	9.0	7.0
23	19.0	19.0	5.5	5.0	4.0	3.0	6.0	6.0	3.5	2.0	7.0	5.5
24	19.0	18.5	5.5	5.0	5.0	3.5	7.0	6.0	3.0	2.5	6.5	5.0
25	18.5	18.0	6.0	5.0	5.5	4.0	7.0	5.0	4.5	2.5	10.5	5.5
26	18.0	17.0	5.0	4.5	7.0	6.0	5.0	3.5	4.5	4.0	11.5	5.5
27	18.0	17.0	5.5	5.0	9.5	7.0	3.5	2.0	5.5	3.5	15.0	8.0
28	18.0	17.0	6.0	5.5	9.5	8.0	2.0	1.5	6.5	4.5	14.0	8.0
29	18.0	17.0	6.5	5.5	8.0	6.5	2.0	1.0	8.5	6.0	9.0	8.5
30	18.0	17.0	6.5	5.0	8.5	6.5	3.0	1.5	---	---	9.5	8.0
31	18.5	17.0	---	---	8.5	7.0	2.0	0.5	---	---	10.5	8.0
MONTH	24.0	15.0	19.0	4.5	9.5	3.0	7.0	0.5	---	---	15.0	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	23.0	17.0	19.0	16.5	24.0	20.5	25.5	24.5	24.5	24.0
2	8.5	7.5	21.0	18.0	20.0	17.0	24.0	22.5	25.5	24.5	24.5	23.5
3	9.5	7.0	25.0	18.5	22.0	18.5	23.5	22.0	26.0	24.5	24.0	22.0
4	10.0	9.0	23.0	20.5	23.5	20.5	23.5	22.5	25.5	24.5	22.0	21.0
5	11.0	8.5	19.0	18.0	24.0	21.0	23.0	21.5	24.5	23.0	22.5	21.0
6	13.0	10.5	19.0	17.0	23.5	21.5	22.0	20.0	---	---	22.5	20.5
7	13.0	7.0	---	---	22.0	20.5	22.0	20.0	---	---	22.5	21.0
8	9.0	6.0	---	---	---	---	22.5	20.0	---	---	22.0	21.5
9	11.0	5.5	---	---	---	---	23.0	21.0	---	---	23.0	21.0
10	15.5	6.0	---	---	---	---	23.5	22.0	---	---	22.5	20.5
11	---	---	---	---	---	---	25.5	22.5	---	---	22.5	20.5
12	---	---	19.0	18.0	---	---	26.0	23.5	---	---	22.5	22.0
13	13.5	12.0	18.5	17.5	---	---	26.0	24.5	---	---	---	---
14	16.0	12.5	18.5	17.5	23.0	21.0	27.5	25.0	---	---	---	---
15	17.0	12.5	19.0	18.0	23.0	22.0	27.0	25.0	---	---	23.5	22.5
16	17.0	13.5	18.5	16.0	23.0	21.5	25.5	24.5	---	---	23.5	22.5
17	19.5	13.5	17.0	15.0	22.5	21.0	25.5	24.0	---	---	24.0	22.5
18	26.0	14.0	18.0	16.0	24.0	21.0	27.0	24.0	---	---	24.0	22.5
19	19.0	16.0	19.0	17.0	25.0	22.0	27.0	25.0	---	---	24.0	23.0
20	18.0	13.5	19.0	18.0	24.5	23.0	28.0	25.5	---	---	23.5	22.0
21	17.0	13.5	20.0	18.0	22.5	21.0	28.0	26.0	---	---	23.0	21.5
22	16.0	14.0	21.0	18.5	21.0	18.5	30.0	26.0	25.5	24.5	23.0	22.0
23	18.5	14.5	22.5	19.5	18.5	16.5	29.5	27.0	26.5	24.5	22.0	20.5
24	18.5	16.5	22.5	19.5	16.5	16.0	29.5	28.0	26.5	25.0	21.0	21.0
25	18.5	13.0	23.0	20.0	17.5	16.0	28.5	26.5	---	---	22.5	21.0
26	19.5	13.0	23.0	21.5	20.5	17.0	27.5	25.0	---	---	22.5	21.5
27	20.5	14.5	22.5	20.5	22.5	19.5	27.0	25.5	---	---	22.5	21.5
28	21.0	15.5	22.0	20.0	22.5	21.5	26.5	25.0	---	---	21.5	20.5
29	21.0	16.0	22.0	20.0	23.0	21.5	25.5	24.0	---	---	21.0	20.5
30	23.5	18.5	21.5	20.0	22.0	21.0	24.5	23.5	---	---	20.5	18.0
31	---	---	20.0	17.5	---	---	25.5	23.0	---	---	---	---
MONTH	26.0	5.5	25.0	15.0	25.0	16.0	30.0	20.0	---	---	24.5	18.0
YEAR	30.0	0.5										

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1480	74	296	846	57	130	2330	19	120
2	1380	57	212	827	50	112	2080	37	208
3	1330	53	190	808	41	89	1830	28	138
4	1280	59	204	865	33	77	1700	26	119
5	1240	58	194	808	26	57	1550	39	163
6	1220	63	208	770	18	37	3050	81	965
7	1170	50	158	770	17	35	10300	985	27400
8	1130	39	119	808	19	41	12500	485	16400
9	1110	47	141	808	15	33	9890	346	9240
10	1110	38	114	808	14	31	6740	284	5170
11	1220	41	135	827	18	40	5610	162	2450
12	1090	39	115	827	23	51	4960	48	643
13	865	43	100	808	34	74	4200	74	839
14	808	49	107	789	38	81	3700	85	849
15	808	47	103	770	37	77	4740	97	1240
16	922	40	100	753	28	57	9020	184	4480
17	1020	48	132	753	26	53	9910	112	3000
18	1170	65	205	846	28	64	9510	188	4830
19	1150	56	174	865	42	98	6890	90	1670
20	1090	54	159	770	23	48	5450	50	736
21	1020	57	157	922	24	60	5030	55	747
22	960	59	153	1090	24	71	4490	47	570
23	941	60	152	1040	20	56	3880	44	461
24	1000	48	130	922	34	85	3380	37	338
25	1040	41	115	846	69	158	3160	38	324
26	1130	44	134	736	58	115	2940	48	381
27	1130	40	122	685	28	52	2850	53	408
28	1040	45	126	865	17	40	2810	37	281
29	981	58	154	1090	18	53	2770	28	209
30	941	45	114	1600	16	69	3030	47	434
31	884	48	115	--	--	--	8520	376	9580
TOTAL	33660	--	4638	25922	--	2044	158820	--	94393

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13100	176	6230	2440	14	92	3700	44	440
2	12600	79	2690	2420	15	98	6600	139	3400
3	10400	81	2270	2460	8	53	16500	373	16600
4	8620	80	1860	2870	8	62	17200	209	9710
5	9720	102	2680	2590	15	105	14500	134	5250
6	9360	102	2580	2440	23	152	11400	93	2860
7	7860	69	1460	2200	32	190	8500	75	1720
8	6030	30	488	2000	25	135	7000	79	1490
9	5250	63	893	1900	14	72	6220	78	1310
10	6470	83	1450	1800	14	68	5500	54	802
11	7780	77	1620	1800	15	73	4960	44	589
12	9300	78	1960	1800	33	160	4550	42	516
13	8560	84	1940	3660	109	1280	4150	44	493
14	7020	88	1670	7170	268	5190	4010	24	260
15	5460	78	1150	9090	160	3930	4650	32	402
16	3900	63	663	10200	154	4240	7780	110	2310
17	3140	34	288	9760	118	3110	11300	108	3300
18	3520	33	314	8540	57	1310	14500	258	10100
19	3610	33	322	7690	48	997	13500	192	7000
20	3320	30	269	6280	45	763	9680	92	2400
21	3110	32	269	4800	36	467	6920	83	1550
22	2980	98	789	4280	29	335	7500	155	3140
23	3110	134	1130	3860	28	292	12000	134	4340
24	4040	148	1610	4550	45	553	15500	146	6110
25	4330	92	1080	4100	39	432	12900	86	3000
26	4510	48	584	4460	43	518	9200	55	1370
27	3920	27	286	4150	63	706	6870	66	1220
28	3360	21	191	3740	45	454	6030	68	1110
29	2940	32	254	3610	37	361	6030	72	1170
30	2730	30	221	--	--	--	6110	76	1250
31	2400	17	110	--	--	--	5250	61	865
TOTAL	182450	--	39321	126660	--	26198	270510	--	96077

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4580	42	519	8980	217	5260	4890	149	1970
2	4100	37	410	6910	155	2890	3700	84	839
3	3540	41	392	5120	118	1630	3450	68	633
4	3610	42	409	4730	110	1400	3250	67	588
5	4150	63	706	4150	95	1060	2960	65	519
6	3450	73	680	3560	80	769	2710	57	417
7	6930	298	7530	3430	98	908	2490	49	329
8	16800	754	34200	3320	78	699	2290	46	284
9	20400	427	23500	11200	261	9540	2130	43	247
10	21900	202	11900	21700	688	40300	1950	35	184
11	14000	190	7180	26200	272	19200	3030	122	1210
12	11000	213	6330	26600	156	11200	2900	436	3410
13	21900	2090	133000	17900	174	8410	2030	265	1450
14	26200	930	65800	17500	148	6990	3020	198	1610
15	26300	780	55400	20600	163	9070	3410	208	1920
16	28400	452	34700	21600	189	11000	9960	848	26200
17	27400	484	35800	18000	169	8210	12100	568	18600
18	23700	363	23200	14800	194	7750	6810	211	3880
19	20900	260	14700	12900	248	8640	4380	144	1700
20	15500	239	10000	12100	210	6860	3560	96	923
21	17100	242	11200	9430	128	3260	3070	76	630
22	26000	378	26500	6280	113	1920	2690	47	341
23	26200	326	23100	4890	113	1490	2440	45	296
24	25300	333	22700	4280	106	1220	2310	44	274
25	22200	327	19600	3560	96	923	2150	42	244
26	18500	283	14100	3450	86	801	2000	45	243
27	15800	239	10200	3120	77	649	1830	49	242
28	12600	225	7650	2870	53	411	1650	50	223
29	10700	186	5370	2710	34	249	1750	101	477
30	9740	187	4920	2750	27	200	2730	134	988
31	--	--	--	4260	89	1190	--	--	--
TOTAL	488900	--	611696	308900	--	174099	103640	--	70871

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2610	183	1290	992	30	80	1090	42	124
2	2130	138	794	907	32	78	981	38	101
3	2330	93	585	845	37	84	1060	44	126
4	2810	166	1260	951	45	116	1110	32	96
5	6070	331	5420	1170	44	139	1020	32	88
6	6850	188	3480	1130	37	113	955	32	83
7	5960	139	2240	917	37	92	795	33	71
8	3970	121	1300	1070	36	104	748	33	67
9	2870	95	736	1170	33	104	736	31	62
10	2440	88	580	1140	33	102	702	30	57
11	2690	100	726	1050	37	105	668	30	54
12	2380	86	553	878	40	95	689	29	54
13	2530	46	314	785	43	91	1480	37	148
14	2870	17	132	762	42	86	2060	101	562
15	2890	14	109	726	40	78	1350	50	182
16	2530	21	143	696	38	71	1700	67	371
17	2630	67	476	679	36	66	3710	235	2350
18	4990	165	2220	687	96	178	2850	178	1370
19	5970	224	3610	4340	236	2960	1830	102	504
20	5030	153	2080	6300	464	7890	1370	64	237
21	4150	159	1780	4550	216	2650	1210	54	176
22	2970	138	1110	2940	133	1060	1130	53	162
23	2300	92	571	2120	134	767	1100	47	140
24	2060	68	378	5240	416	5890	1070	37	107
25	1900	71	364	5330	346	4980	1290	44	163
26	1780	57	274	4460	257	3090	1840	85	422
27	1530	36	149	2780	186	1400	3500	155	1530
28	1410	32	122	2150	115	668	3970	214	2290
29	1340	32	116	1990	97	521	4820	224	2920
30	1210	33	108	1560	77	324	6300	249	4240
31	1090	31	91	1310	62	219	--	--	--
TOTAL	94290	--	33111	61625	--	34201	53134	--	18857

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	1508511
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	1205506

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO
(Radiochemical station)

LOCATION.--Lat 38°52'52", long 83°01'03", Scioto County, at bridge on State Highway 348 at Lucasville, 0.4 mile downstream from Miller Run, and 4.9 miles upstream from Scioto Brush Creek.

DRAINAGE AREA.--6,178 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1972.
Water temperatures: October 1956 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum daily, 801 micromhos Nov. 23; minimum daily, 303 micromhos Apr. 8.
Water temperatures: Maximum, 28.0°C July 22, 23; minimum, freezing point on several days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.											
04...	1000	--	--	228	6	197	81	35	.6	1.2	--
18...	1000	--	--	262	0	215	120	53	1.4	1.8	--
20...	1000	--	--	228	20	220	97	42	1.1	1.6	--
20...	1330	50	140	--	--	223	--	44	--	2.0	--
NOV.											
10...	1000	--	--	222	8	195	100	45	.7	1.9	--
16...	1400	100	290	--	--	230	--	52	--	--	--
18...	1000	--	--	278	0	228	110	48	.7	1.8	--
23...	1000	--	--	270	0	221	120	53	1.0	2.1	--
DEC.											
01...	1000	--	--	242	6	208	98	50	.4	1.6	--
08...	1000	--	--	112	0	92	49	14	.3	2.2	--
21...	1000	--	--	216	0	177	93	30	.4	2.7	--
22...	1445	120	47	--	--	192	--	26	--	2.8	--
JAN.											
06...	0800	--	--	170	0	139	73	20	.4	4.4	--
18...	1500	130	72	--	--	195	--	34	--	--	--
20...	0900	--	--	250	0	205	85	32	.4	5.0	--
24...	0800	--	--	202	0	166	84	31	.4	4.3	--
FEB.											
11...	0800	--	--	236	0	194	90	43	.6	3.8	--
15...	0800	--	--	106	0	87	57	20	.4	2.8	--
22...	0800	--	--	194	0	159	81	31	.5	4.8	--
23...	1530	20	33	--	--	177	--	32	--	3.7	--
MAR.											
02...	0800	--	--	162	0	133	74	28	.4	3.6	--
05...	0900	--	--	190	0	156	67	28	.4	4.7	--
28...	1400	20	0	--	--	162	--	26	--	--	--
31...	0800	--	--	202	0	166	78	28	.5	5.8	--
APR.											
01...	1000	--	--	208	0	171	81	34	.4	5.0	--
08...	1000	--	--	114	0	94	50	16	.2	1.8	--
20...	1000	--	--	162	0	133	57	20	.4	4.5	--
27...	1600	660	24	--	--	131	--	14	--	3.8	--
MAY											
11...	1000	--	--	218	0	179	53	14	.2	--	3.8
22...	1000	--	--	190	0	156	64	19	.2	--	3.6
24...	1430	35	0	--	--	198	--	22	--	--	--
29...	1000	--	--	250	8	218	80	25	.3	--	3.2
JUNE											
07...	1000	--	--	244	0	200	79	27	.4	--	2.8
17...	1000	--	--	158	0	130	56	18	.3	--	3.9
20...	1440	110	12	--	--	184	--	24	--	3.9	--
30...	1000	--	--	280	0	230	95	31	.4	--	2.4
JULY											
01...	1000	--	--	230	16	215	89	31	.4	--	2.8
23...	1000	--	--	162	6	143	62	24	.3	--	3.5
26...	1430	30	0	--	--	180	--	32	--	--	--
27...	1000	--	--	226	0	185	77	30	.4	--	2.9
AUG.											
02...	1000	--	--	250	0	205	92	37	.4	--	2.5
13...	1000	--	--	256	0	210	110	44	.6	--	1.2
22...	1000	--	--	122	0	100	57	21	.3	--	2.3
31...	1530	30	24	--	--	180	--	35	--	2.3	--
SEP.											
04...	1000	--	--	219	18	210	92	34	.8	--	2.6
13...	1000	--	--	274	0	225	94	45	1.2	--	2.0
27...	1545	50	22	--	--	184	--	46	--	--	--
29...	1000	--	--	130	14	130	70	30	.7	--	2.3

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 20- DEC. 22	77	30	.7	1	0	95	13	22	280
JAN. 18- MAR. 28	62	29	.5	1	0	110	17	28	310
APR. 27- JUNE 20	63	24	.6	0	0	33	34	0	220
JULY 26- SEPT. 27	66	25	1.4	0	2	41	18	0	330

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum daily, 1,100 micromhos Jan. 23, 1970; minimum daily, 207 micromhos May 8, 1961.
Water temperatures: Maximum, 29.0°C July 22, 1957, July 20, 21, Aug. 7, 1969; minimum, freezing point on many days during winter periods.

REMARKS.--Samples for iron and manganese were filtered clear when collected. Daily samples were collected at this station and samples were selected for analysis on the following basis: (1) Maximum daily specific conductance for each month, (2) minimum daily specific conductance for each month, (3) median daily specific conductance for each month, and (4) a special sample was collected each month as part of the Environmental Protection Agency national network. Determinations for trace metals were made on quarterly composites of the special monthly sample. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
04...	5.2	--	--	.68	--	2.1	270	72	614	8.3
18...	7.9	--	--	1.0	--	3.2	320	100	785	8.0
20...	6.9	--	--	.72	--	2.2	310	89	695	8.4
20...	--	.01	.78	.73	.50	--	320	--	650	7.3
NOV.										
10...	8.5	--	--	1.0	--	3.1	280	84	693	8.4
16...	--	--	--	--	--	--	330	--	760	7.8
18...	7.9	--	--	.87	--	2.7	330	100	766	7.4
23...	9.4	--	--	1.3	--	4.0	330	110	801	8.2
DEC.										
01...	7.2	--	--	.92	--	2.8	300	91	721	8.3
08...	9.7	--	--	.77	--	2.4	150	58	337	7.6
21...	12	--	--	.41	--	1.3	280	100	611	8.0
22...	--	.32	.82	.48	.21	--	[illegible]	--	625	7.7
JAN.										
06...	20	--	--	.34	--	1.0	230	90	480	7.6
18...	--	--	--	--	--	--	310	--	600	7.6
20...	22	--	--	.39	--	1.2	310	100	648	7.5
24...	19	--	--	.42	--	1.3	260	94	577	7.4
FEB.										
11...	17	--	--	.52	--	1.6	300	110	678	8.2
15...	12	--	--	.37	--	1.1	150	63	356	7.8
22...	21	--	--	.35	--	1.1	260	100	566	8.0
23...	--	.11	.84	.30	.19	--	280	--	600	7.8
MAR.										
02...	16	--	--	.29	--	.90	240	110	526	8.1
05...	21	--	--	.43	--	1.3	200	44	455	8.0
28...	--	--	--	--	--	--	260	--	525	7.8
31...	26	--	--	.28	--	.87	270	100	576	8.2
APR.										
01...	22	--	--	.23	--	.70	270	99	573	7.6
08...	8.2	--	--	.48	--	1.5	150	56	303	7.4
20...	20	--	--	.44	--	1.4	210	77	427	8.2
27...	--	.08	2.0	.44	.10	--	200	--	440	7.5
MAY										
11...	17	--	--	.29	--	.89	190	12	398	8.2
22...	16	--	--	.24	--	.72	240	84	498	7.6
24...	--	--	--	--	--	--	280	--	590	7.9
29...	14	--	--	.29	--	.89	310	91	643	8.4
JUNE										
07...	12	--	--	.26	--	.81	300	100	620	7.6
17...	17	--	--	1.0	--	3.1	200	70	441	7.4
20...	--	.06	1.4	.36	.20	--	300	--	560	7.0
30...	11	--	--	.25	--	.76	330	100	694	7.6
JULY										
01...	12	--	--	.26	--	.79	320	100	648	8.6
23...	15	--	--	.52	--	1.6	220	77	485	8.4
26...	--	--	--	--	--	--	280	--	580	8.0
27...	13	--	--	.33	--	1.0	270	84	597	8.0
AUG.										
02...	11	--	--	.32	--	.98	300	94	676	7.6
13...	5.2	--	--	.69	--	2.1	310	100	731	7.6
22...	10	--	--	.63	--	1.9	170	70	394	7.3
31...	--	.18	2.1	.56	.48	--	260	--	600	7.8
SEP.										
04...	11	--	--	.56	--	1.7	300	90	648	8.5
13...	8.8	--	--	.55	--	1.7	320	95	720	8.2
27...	--	--	--	--	--	--	290	--	635	7.2
29...	10	--	--	.37	--	1.1	210	80	482	8.4

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED STRON- TIUM 90 (PC/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 20- DEC. 22	--	.8	9.8	3.3	6.7	460	2.8	.9	2.0	2.3	44
JAN. 18- MAR. 28	1100	.7	4.4	1.5	3.7	400	.8	.3	1.8	2.1	23
APR. 27- JUNE 20	--	.4	5.4	1.8	4.3	380	5.3	1.8	2.1	2.6	74
JULY 26- SEPT. 27	--	.5	7.8	2.6	5.4	360	1.0	.3	1.2	1.3	24

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TUR-BID-ITY (JTU)	COLOR (PLAT-INUM-COBALT UNITS)
OCT.										
04...	23.0	--	--	--	--	--	--	--	--	--
18...	18.0	--	--	--	--	--	--	--	--	--
20...	18.0	--	--	--	--	--	--	--	--	--
20...	19.5	23.0	6.6	71	3.6	--	8000	180	30	30
NOV.										
10...	8.0	--	--	--	--	--	--	--	--	--
16...	14.5	20.0	7.2	70	6.6	--	14000	140	30	50
18...	12.0	--	--	--	--	--	--	--	--	--
23...	5.0	--	--	--	--	--	--	--	--	--
DEC.										
01...	4.0	--	--	--	--	--	--	--	--	--
08...	9.0	--	--	--	--	--	--	--	--	--
21...	6.0	--	--	--	--	--	--	--	--	--
22...	5.0	13.0	10.8	84	3.6	0	60000	3600	35	10
JAN.										
06...	3.0	--	--	--	--	--	--	--	--	--
18...	6.0	17.5	12.0	96	5.6	--	8600	1000	20	15
20...	4.0	--	--	--	--	--	--	--	--	--
24...	8.0	--	--	--	--	--	--	--	--	--
FEB.										
11...	2.0	--	--	--	--	--	--	--	--	--
15...	5.0	--	--	--	--	--	--	--	--	--
22...	8.0	--	--	--	--	--	--	--	--	--
23...	2.0	.5	11.6	84	4.5	--	24000	840	20	15
MAR.										
02...	10.0	--	--	--	--	--	--	--	--	--
05...	3.0	--	--	--	--	--	--	--	--	--
28...	8.5	16.0	10.0	85	2.1	1	2900	340	35	10
31...	9.0	--	--	--	--	--	--	--	--	--
APR.										
01...	9.0	--	--	--	--	--	--	--	--	--
08...	7.0	--	--	--	--	--	--	--	--	--
20...	16.0	--	--	--	--	--	--	--	--	--
27...	14.0	22.0	8.2	79	3.0	--	9600	1300	100	20
MAY										
11...	16.5	--	--	--	--	--	--	--	--	--
22...	19.0	--	--	--	--	--	--	--	--	--
24...	22.5	26.5	6.6	75	1.6	--	32000	2800	60	10
29...	20.0	--	--	--	--	--	--	--	--	--
JUNE										
07...	22.0	--	--	--	--	--	--	--	--	--
17...	22.5	--	--	--	--	--	--	--	--	--
20...	23.5	24.0	6.8	79	2.8	1	820	210	70	15
30...	21.0	--	--	--	--	--	--	--	--	--
JULY										
01...	22.0	--	--	--	--	--	--	--	--	--
23...	28.0	--	--	--	--	--	--	--	--	--
26...	28.0	26.0	8.8	110	4.6	--	740	60	30	20
27...	26.0	--	--	--	--	--	--	--	--	--
AUG.										
02...	24.0	--	--	--	--	--	--	--	--	--
13...	22.5	--	--	--	--	--	--	--	--	--
22...	24.0	--	--	--	--	--	--	--	--	--
31...	26.0	31.0	9.2	110	3.8	--	13000	860	35	15
SEP.										
04...	22.0	--	--	--	--	--	--	--	--	--
13...	22.5	--	--	--	--	--	--	--	--	--
27...	23.0	25.0	6.8	78	1.8	5	3100	1200	40	20
29...	21.0	--	--	--	--	--	--	--	--	--

03237100 SCIOTO RIVER AT LUCASVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT, BETWEEN 0800 AND 1600)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	740	721	643	627	472	573	448	606	648	666	607
2	631	738	662	504	628	526	570	444	572	625	676	614
3	620	719	673	504	657	532	573	477	579	611	681	641
4	614	730	645	559	649	467	531	513	598	635	682	648
5	625	740	649	559	600	455	506	545	632	644	694	661
6	625	748	627	480	607	528	484	564	631	623	639	608
7	653	752	361	492	623	---	435	590	620	586	674	646
8	656	766	337	499	626	514	303	597	645	622	674	665
9	683	762	419	559	641	511	435	585	649	603	695	704
10	674	693	476	561	649	490	421	460	659	604	715	718
11	693	722	502	491	678	488	492	398	673	604	703	718
12	695	771	544	490	673	531	460	407	692	590	707	715
13	688	764	578	578	471	530	454	452	685	591	731	720
14	685	773	567	578	477	548	311	448	502	586	691	713
15	708	780	587	573	356	549	363	456	551	533	687	698
16	710	789	576	600	357	568	380	425	528	585	695	648
17	763	766	553	601	---	571	347	430	441	593	701	676
18	785	766	573	626	476	496	365	466	434	586	692	648
19	774	766	624	626	524	483	412	488	505	598	695	648
20	695	784	629	648	520	535	427	471	560	534	724	539
21	695	786	611	644	561	540	442	464	594	527	429	566
22	711	782	598	623	566	499	327	498	616	493	394	586
23	730	801	616	624	582	506	306	525	614	485	443	623
24	713	780	602	577	577	498	368	564	627	528	504	638
25	710	786	636	575	395	501	366	589	652	544	554	659
26	726	778	604	542	395	488	391	604	653	576	420	678
27	734	788	641	541	384	527	406	613	673	597	429	657
28	724	788	648	585	385	527	426	631	684	620	455	646
29	718	778	654	585	---	553	441	643	686	632	504	482
30	727	762	626	595	---	552	448	642	694	636	552	486
31	734	---	643	593	---	576	---	580	---	640	584	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT, BETWEEN 0800 AND 1600)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	17.0	4.0	6.0	2.0	8.0	9.0	15.0	17.0	22.0	24.5	25.0
2	23.0	19.0	3.0	6.0	1.0	10.0	8.0	16.0	18.0	23.0	24.0	24.5
3	24.0	16.0	3.0	5.0	4.0	8.0	8.0	15.5	19.5	23.0	24.0	23.0
4	23.0	13.0	4.0	6.0	2.0	4.0	8.0	16.5	21.0	23.0	24.0	22.0
5	23.0	13.0	5.0	4.0	0.0	3.0	8.0	15.0	21.5	21.0	23.0	22.0
6	22.0	12.0	6.0	3.0	1.0	4.0	10.0	16.0	21.5	21.0	23.0	20.0
7	20.0	10.0	8.0	3.0	1.0	---	10.0	17.0	22.0	19.5	23.5	22.5
8	18.0	8.0	9.0	3.0	0.0	5.0	7.0	17.5	21.0	21.0	23.5	22.5
9	17.0	8.0	8.0	4.0	0.0	4.0	7.0	16.5	21.5	21.0	22.0	23.0
10	18.0	8.0	9.0	5.0	0.0	4.0	7.0	14.5	20.5	22.0	21.0	21.0
11	15.0	8.0	10.0	5.0	2.0	5.0	9.0	16.5	19.5	24.0	23.0	22.5
12	14.0	8.0	8.0	5.0	3.0	9.0	9.0	15.0	19.0	24.0	21.0	22.0
13	15.0	9.0	7.0	6.0	4.0	10.0	12.0	15.5	21.0	25.0	22.5	22.5
14	16.0	8.0	7.0	4.0	4.0	9.0	14.0	15.5	21.0	26.0	23.5	23.0
15	17.0	12.0	9.0	1.0	5.0	8.0	16.0	16.0	22.0	25.0	26.0	20.0
16	17.0	13.0	9.0	0.0	5.0	9.0	16.0	16.0	22.0	25.0	26.0	22.0
17	18.0	13.0	8.0	0.0	---	8.0	14.0	15.5	22.5	24.0	25.0	22.5
18	18.0	12.0	6.0	1.0	5.0	10.0	15.0	16.0	21.0	26.0	25.5	23.0
19	18.0	14.0	5.0	2.0	3.0	8.0	16.0	17.5	22.5	25.5	25.5	23.0
20	18.0	10.0	5.0	4.0	2.0	9.0	16.0	17.0	22.0	26.0	25.0	23.5
21	19.0	10.0	6.0	3.0	3.0	8.0	13.0	18.5	22.0	27.0	24.0	22.5
22	18.0	8.0	5.0	6.0	8.0	9.0	14.0	19.0	20.0	28.0	24.0	22.0
23	19.0	5.0	3.0	7.0	4.0	6.0	15.0	19.5	19.0	28.0	25.0	21.0
24	24.0	5.0	5.0	8.0	4.0	6.0	15.0	19.5	16.0	27.5	25.0	22.0
25	18.0	4.0	6.0	7.0	5.0	5.0	14.0	20.5	16.0	26.0	24.5	21.0
26	17.0	4.0	8.0	5.0	4.0	4.0	13.0	21.0	17.0	26.0	25.0	21.0
27	17.0	5.0	8.0	4.0	4.0	6.0	13.5	21.0	18.0	26.0	24.0	21.5
28	16.0	5.0	7.0	7.0	5.0	7.0	13.0	21.0	20.0	25.0	24.0	21.5
29	16.0	6.0	6.0	5.0	---	8.0	13.5	20.0	21.0	24.0	23.0	21.0
30	17.0	5.0	8.0	1.0	---	9.0	14.5	20.5	21.0	24.0	23.0	19.0
31	17.0	---	7.0	0.0	---	9.0	---	19.0	---	23.0	23.5	---

03237280 UPPER TWIN CREEK AT McGAW, OHIO
(Hydrologic bench-mark, pesticide, and radiochemical station)

LOCATION.--Lat 38°38'37", long 83°12'57", Scioto County, at gaging station on right bank, 0.3 mile downstream from Brown Run, 0.3 mile upstream from Tucker Run, 0.7 mile upstream from bridge on U.S. Highway 52 at McGaw, 2.7 miles northeast of Buena Vista and 3.2 miles upstream from mouth. Prior to July 21, 1972, at site 0.7 mile downstream.

DRAINAGE AREA.--12.2 sq mi (prior to July 21, 1972, 12.8 sq mi).

PERIOD OF RECORD.--Chemical analyses: Water years 1964-67 (partial-record station); August 1967 to September 1972.
Water temperatures: October 1963 to September 1966, October 1967 to September 1970.
Sediment records: Water years 1964-69 (partial-record station), October 1969 to September 1972.

EXTREMES.--1971-72:
Sediment concentrations: Maximum daily, 388 mg/l Apr. 21; minimum daily, 0 mg/l on many days during October to February, April to June, August and September.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT. 19...	1410	.76	6.4	0	0	11	3.6	2.5	2.2	25
NOV. 16...	1045	7.0	9.5	20	5	10	5.2	4.0	2.0	24
DEC. 22...	1100	6.6	9.6	0	0	4.0	3.9	2.8	1.6	13
JAN. 18...	1000	8.4	10	40	15	6.4	4.6	5.0	1.6	11
FEB. 23...	1030	18	9.9	10	18	4.0	4.3	2.7	1.6	10
MAR. 28...	1000	14	10	48	9	4.7	3.5	2.9	1.7	11
APR. 27...	1000	17	11	20	86	3.7	3.8	2.8	1.7	11
MAY 24...	1000	2.9	11	10	62	4.0	5.0	3.2	2.1	14
JUNE 20...	1000	2.1	8.5	130	0	6.1	5.1	5.0	2.3	18
JULY 26...	0930	.48	11	30	32	8.8	5.0	4.4	2.8	20
AUG. 31...	1015	.05	10	30	20	12	8.1	5.5	3.0	35
SEP. 27...	0930	1.4	10	60	30	9.3	6.2	5.0	3.3	21

DATE	TIME	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 19...	1410	0	0	0	0	0	1.6	3	6	40
JUNE 20...	1000	0	2	0	0	2	<.5	0	0	110

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

EXTREMES.--1971-72--Continued
Sediment discharges: Maximum daily, 951 tons Apr. 21; minimum daily, 0 tons on many days during October to February, April to September.

Period of record:
Sediment concentrations (1970-72): Maximum daily, 388 mg/l Apr. 21, 1972; minimum daily, 0 mg/l on many days during 1970-72.
Sediment discharges (1970-71): Maximum daily, 951 tons Apr. 21, 1972; minimum daily, 0 tons on many days during 1970-72.

REMARKS.--Pesticide analyses for this station on page 388. Flow affected by ice Jan. 14-18, Jan. 28 to Feb. 12, Feb. 18-23.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT. 19...	0	27	3.0	.0	.40	1.6	.030	.09	86	69
NOV. 16...	0	30	4.0	.1	.30	1.2	.010	.02	86	78
DEC. 22...	0	21	2.0	.1	.10	.7	.010	.02	50	52
JAN. 18...	0	25	10	.0	.20	.9	.060	.17	55	69
FEB. 23...	0	23	2.0	.0	.20	.8	.000	.00	52	53
MAR. 28...	0	23	2.0	.1	.10	.5	.010	.03	57	54
APR. 27...	0	21	1.0	.1	.20	1.0	.000	.01	45	52
MAY 24...	0	27	2.0	.1	.10	.3	.010	.02	55	62
JUNE 20...	0	28	4.0	.0	.20	.8	.010	.03	70	68
JULY 26...	0	32	4.5	.1	.40	1.9	.010	.02	78	81
AUG. 31...	0	37	6.0	.1	.60	2.5	.020	.06	99	101
SEP. 27...	0	38	6.0	.1	.40	1.8	.020	.07	84	90

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
SEP. 26...	2.6	4.1	96	<.4	<.4	<.4	3

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	COLOR (PLATINUM-COBALT UNITS)
OCT. 19...	42	22	114	6.9	15.0	9.4	92	.2	740	5
NOV. 16...	46	27	118	6.9	13.0	9.6	90	1.8	360	5
DEC. 22...	26	16	76	6.9	5.0	12.2	95	.6	80	5
JAN. 18...	35	26	102	6.9	2.0	13.2	96	.2	60	5
FEB. 23...	27	19	76	6.7	2.0	13.0	94	.8	34	5
MAR. 28...	26	17	83	7.7	7.0	11.8	97	.0	31	3
APR. 27...	24	16	77	6.9	12.5	10.2	95	1.3	38	3
MAY 24...	30	19	92	6.9	17.5	9.0	94	.0	420	0
JUNE 20...	36	21	103	7.9	21.0	8.8	98	.2	9700	5
JULY 26...	42	26	121	7.0	22.0	8.0	91	.6	700	1
AUG. 31...	64	35	162	6.9	20.5	8.6	100	.2	380	3
SEP. 27...	48	32	168	7.0	21.0	8.4	93	.2	260	3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
APR. 13, 1972	0930	12.0	318	622	534	24	33	42	53	68	86	98	99	100	--	--
APR. 21......	2000	12.0	1220	1810	5960	20	27	36	47	66	84	98	99	100	--	--

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.8	0	0	.34	1	0	1.4	3	.01
2	2.3	0	0	.32	1	0	.70	3	.01
3	2.3	0	0	.30	1	0	.55	3	0
4	1.9	0	0	.28	1	0	.50	3	0
5	1.6	0	0	.26	1	0	.46	3	0
6	1.4	0	0	.24	1	0	76	45	13
7	1.2	0	0	.24	1	0	156	72	49
8	1.1	0	0	.22	1	0	42	2	.23
9	1.1	0	0	.24	1	0	20	0	0
10	.95	0	0	.20	2	0	16	1	.04
11	.76	0	0	.20	2	0	18	2	.10
12	.76	0	0	.18	3	0	12	2	.06
13	.70	0	0	.16	3	0	11	2	.06
14	.65	0	0	.15	4	0	9.0	2	.05
15	.70	0	0	.16	0	0	12	2	.06
16	.65	0	0	.15	0	0	13	2	.07
17	.55	0	0	.15	0	0	12	2	.06
18	.55	0	0	.14	1	0	10	2	.05
19	.42	0	0	.15	1	0	9.0	2	.05
20	.26	0	0	.18	2	0	17	2	.09
21	.26	0	0	.22	2	0	15	2	.08
22	.34	0	0	.22	2	0	13	3	.11
23	.34	0	0	.24	2	0	11	3	.09
24	.65	0	0	.26	2	0	11	3	.09
25	.76	0	0	.28	2	0	9.8	3	.08
26	.55	0	0	.28	3	0	9.0	3	.07
27	.55	0	0	.34	3	0	8.2	3	.07
28	.46	0	0	.38	3	0	8.2	3	.07
29	.42	0	0	1.1	3	.01	7.8	3	.06
30	.38	0	0	2.5	3	.02	11	3	.09
31	.32	0	0	--	--	--	12	3	.10
TOTAL	27.68	--	0	10.08	--	.03	552.61	--	63.85

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	11	3	.09	7.6	0	0	--	--	--
2	21	8	.45	7.0	0	0	--	--	--
3	23	5	.31	7.6	0	0	--	--	--
4	30	3	.24	13	0	0	--	--	--
5	44	3	.36	10	0	0	38	8	.82
6	25	2	.14	7.6	0	0	34	8	.73
7	18	2	.10	6.0	0	0	30	7	.57
8	14	1	.04	5.2	0	0	28	7	.53
9	62	21	7.3	4.7	0	0	25	7	.47
10	47	13	2.0	4.2	0	0	23	7	.43
11	23	5	.31	4.0	0	0	21	7	.40
12	19	4	.21	5.0	0	0	20	7	.38
13	16	3	.13	60	16	2.8	19	7	.36
14	12	3	.10	--	--	--	18	7	.34
15	10	3	.08	--	--	--	16	7	.30
16	9.2	3	.07	--	--	--	18	7	.34
17	8.8	3	.07	18	0	0	18	7	.34
18	8.4	3	.07	--	--	--	17	8	.37
19	9.4	3	.08	--	--	--	16	8	.35
20	22	7	.42	9.6	0	0	14	9	.34
21	26	4	.28	8.0	1	.02	--	--	--
22	21	1	.06	10	2	.05	--	--	--
23	18	0	0	--	--	--	--	--	--
24	16	0	0	--	--	--	--	--	--
25	23	0	0	--	--	--	22	10	.59
26	21	0	0	--	--	--	17	9	.41
27	17	0	0	48	15	1.9	15	7	.28
28	13	0	0	33	6	.53	14	5	.19
29	11	0	0	--	--	--	12	4	.13
30	9.6	0	0	--	--	--	10	3	.08
31	8.4	0	0	--	--	--	16	2	.09
TOTAL	616.8	--	12.91	--	--	--	--	--	--

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UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT McGAW, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	23	2	.12	11	2	.06	3.1	1	.01
2	22	1	.06	13	2	.07	2.1	2	.01
3	--	--	--	--	--	--	1.6	2	.01
4	--	--	--	--	--	--	1.2	2	.01
5	41	0	0	--	--	--	1.3	2	.01
6	--	--	--	--	--	--	1.4	2	.01
7	--	--	--	--	--	--	1.3	2	.01
8	--	--	--	--	--	--	1.0	2	.01
9	23	0	0	24	0	0	.90	1	0
10	19	0	0	18	0	0	.80	1	0
11	17	0	0	16	0	0	.70	1	0
12	17	0	0	14	0	0	.50	1	0
13	86	163	74	12	0	0	1.0	1	0
14	--	--	--	11	0	0	.90	1	0
15	--	--	--	10	0	0	--	--	--
16	53	7	1.0	11	0	0	--	--	--
17	--	--	--	10	0	0	--	--	--
18	--	--	--	8.0	0	0	2.4	2	.01
19	--	--	--	6.7	0	0	1.9	0	0
20	--	--	--	6.1	0	0	2.1	0	0
21	274	388	951	5.1	0	0	2.3	0	0
22	297	132	222	4.4	2	.02	1.7	1	0
23	72	3	.58	3.8	3	.03	1.4	1	0
24	45	0	0	2.9	3	.02	1.3	1	0
25	30	0	0	2.4	2	.01	1.1	2	.01
26	23	0	0	1.9	1	.01	.90	2	0
27	17	0	0	1.6	0	0	.70	2	0
28	14	1	.04	1.1	0	0	.70	2	0
29	12	1	.03	1.1	0	0	.90	2	0
30	11	2	.06	4.8	0	0	7.4	2	.04
31	--	--	--	6.1	1	.02	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.4	2	.02	.58	3	0	.04	2	0
2	2.4	2	.01	.40	3	0	.03	1	0
3	10	2	.05	--	--	--	.06	1	0
4	7.7	2	.04	--	--	--	.05	1	0
5	5.4	2	.03	--	--	--	.04	1	0
6	3.1	3	.03	--	--	--	.03	1	0
7	2.1	3	.02	1.6	2	.01	.03	0	0
8	1.6	3	.01	.97	2	.01	.03	0	0
9	1.1	3	.01	1.8	2	.01	.03	0	0
10	.90	3	.01	1.7	2	.01	.03	0	0
11	.70	3	.01	1.9	2	.01	.03	0	0
12	.90	3	.01	1.3	3	.01	.03	0	0
13	.70	2	0	1.7	3	.01	.03	0	0
14	.40	2	0	1.6	2	.01	.05	0	0
15	.60	2	0	1.2	2	.01	.05	0	0
16	.90	2	0	.71	1	0	.05	0	0
17	1.1	2	.01	.44	0	0	.05	0	0
18	1.1	2	.01	.33	0	0	.09	1	0
19	.90	2	0	.25	1	0	.09	1	0
20	.90	3	.01	.21	1	0	.08	1	0
21	.54	3	0	.17	1	0	.08	1	0
22	.42	3	0	.13	1	0	.07	0	0
23	.36	3	0	.12	1	0	.21	0	0
24	.30	4	0	.08	1	0	1.5	0	0
25	.58	4	.01	.08	1	0	2.3	0	0
26	.48	4	.01	.08	1	0	1.7	0	0
27	.36	4	0	.07	1	0	9.5	29	1.8
28	--	--	--	.05	1	0	5.4	6	.09
29	--	--	--	.05	2	0	3.3	3	.03
30	1.4	3	.01	.05	2	0	3.5	2	.02
31	.98	3	.01	.05	2	0	--	--	--
TOTAL	--	--	--	--	--	--	28.48	--	1.94

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO

LOCATION.--Lat 39°35'00", long 84°01'49", Greene County, at gaging station on right bank at downstream side of bridge on New Burlington Road, 0.3 mile upstream from unnamed right bank tributary, 2.2 miles southwest of Spring Valley, and 2.8 miles downstream from Glady Run.

DRAINAGE AREA.--366 sq mi.

PERIOD OF RECORD.--Chemical analyses: September 1968 to September 1972.
Water temperatures: September 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,040 micromhos Feb. 8; minimum, 261 micromhos June 13.
pH: Maximum, 9.2 Dec. 30; minimum, 4.7 Dec. 2.
Dissolved oxygen: Maximum, 13.3 mg/l Jan. 15, Feb. 4, 5; minimum, 2.8 mg/l Aug. 14, 24.
Water temperatures: Maximum, 28.0°C July 23; freezing point on many days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
13...	1507	88	338	10	61	70	.2	2.9
13...	1605	--	--	--	--	--	--	--
26...	0830	152	342	0	54	51	.2	1.9
26...	1418	--	--	--	--	--	--	--
NOV.								
11...	1155	101	324	22	71	61	.2	2.8
DEC.								
21...	1434	431	336	6	63	40	.2	3.0
28...	1610	316	312	24	64	46	.2	3.1
JAN.								
03...	1200	628	286	14	61	34	.2	2.9
31...	0800	180	376	0	68	68	.2	2.8
FEB.								
08...	1600	160	314	24	63	100	.2	2.3
22...	0805	270	304	20	63	47	.2	2.0
MAR.								
09...	1055	410	291	18	65	38	.2	4.1
27...	1715	476	180	0	64	35	.1	4.7
APR.								
03...	1718	307	243	0	63	40	.2	3.2
13...	1104	4040	138	0	33	16	.2	3.0
MAY								
10...	1010	2560	154	0	39	16	.2	4.8
29...	1256	272	344	0	62	37	.2	2.7
JUNE								
13...	--	--	--	--	--	--	--	--
16...	1230	347	320	20	62	42	.3	3.0
27...	1055	192	334	22	63	45	.2	2.7
JULY								
26...	1525	136	284	26	58	46	.2	2.2
31...	0900	115	358	0	73	53	.2	2.3
AUG.								
07...	1954	250	247	0	52	52	.2	2.4
22...	1225	91	331	10	63	58	.2	2.1
SEP.								
24...	0835	104	356	0	72	60	.2	2.1
28...	--	248	286	0	54	38	.2	1.7

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-70, 1971-72): Maximum, 1,180 micromhos Jan. 1, Mar. 19, 1970; minimum, 261 micromhos June 13, 1972.
pH (1971-72): Maximum, 9.2 Dec. 30, 1971; minimum, 4.7 Dec. 2, 1971.
Dissolved oxygen (1971-72): Maximum, 13.3 mg/l Jan. 15, Feb. 4, 5, 1972; minimum, 2.8 mg/l Aug. 14, 24, 1972.
Water temperatures (1969-70, 1971-72): Maximum, 28.0°C July 2, Aug. 1, 1970, July 23, 1972; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since September 1968. Maximum recorded specific conductance value of 1,570 micromhos occurred Feb. 1, 1971. Minimum recorded specific conductance value of 207 micromhos occurred Aug. 8, 1971. Maximum recorded dissolved oxygen concentration of 14.8 mg/l occurred on Apr. 28, 1971. Minimum recorded dissolved oxygen concentration of 1.1 mg/l occurred on Apr. 14, 1971. Maximum recorded water temperature value of 34.5°C occurred June 26, 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
13...	13	494	370	76	862	--	--
13...	--	--	--	--	--	33	8.0
26...	8.6	434	350	70	761	--	--
26...	--	--	--	--	--	<.5	--
NOV.							
11...	12	508	370	68	858	--	--
DEC.							
21...	13	464	370	84	752	--	--
28...	14	496	390	94	766	--	--
JAN.							
03...	13	464	350	92	691	--	--
31...	12	576	410	100	883	--	--
FEB.							
08...	10	616	390	92	971	--	--
22...	8.9	504	380	97	757	--	--
MAR.							
09...	18	482	370	100	743	--	--
27...	21	332	250	100	666	--	--
APR.							
03...	14	443	320	120	729	--	--
13...	13	226	160	47	347	--	--
MAY							
10...	21	260	200	74	415	--	--
29...	12	462	370	88	741	--	--
JUNE							
13...	--	--	--	--	--	<.5	2.0
16...	13	478	370	74	717	--	--
27...	12	494	380	70	778	--	--
JULY							
26...	9.7	466	360	84	719	--	--
31...	10	524	380	86	824	--	--
AUG.							
07...	11	404	280	77	656	--	--
22...	9.4	506	370	82	814	--	--
SEP.							
24...	9.4	524	380	88	834	--	--
28...	7.6	406	320	85	651	--	--

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	765	522	837	819	759	687	637	507	858	819	---	---
2	---	---	850	823	786	735	654	637	829	808	---	---
3	762	576	872	758	810	777	713	674	824	794	---	---
4	813	549	846	762	819	792	730	685	913	808	---	---
5	801	516	852	831	819	798	735	687	908	842	---	---
6	810	648	864	846	825	501	893	735	873	804	---	---
7	828	561	870	849	609	513	817	766	841	802	---	---
8	861	465	900	777	680	599	788	764	1040	841	---	---
9	810	534	861	816	742	670	778	730	958	883	717	684
10	810	520	864	828	760	730	732	705	884	860	734	707
11	954	669	855	816	789	735	737	702	917	860	739	721
12	935	599	858	831	764	740	727	709	869	842	743	716
13	878	622	858	825	766	727	739	724	1030	858	727	715
14	878	842	849	816	770	323	760	724	1020	714	777	711
15	905	710	846	822	568	391	789	756	733	595	738	714
16	782	359	855	810	638	458	846	786	580	529	738	612
17	662	407	861	822	715	638	831	786	665	575	666	624
18	755	659	858	828	743	715	798	732	701	662	690	660
19	809	749	861	831	769	736	761	734	708	696	711	669
20	836	794	879	819	761	728	764	731	768	702	726	660
21	839	812	834	765	759	576	755	740	775	727	747	675
22	863	818	843	771	648	633	779	749	769	745	693	489
23	860	821	828	783	674	642	826	739	770	704	615	552
24	845	812	864	804	692	674	790	746	794	710	669	612
25	827	728	867	822	718	685	780	735	791	764	687	663
26	806	596	870	840	733	688	775	754	---	---	695	657
27	780	756	861	828	742	706	795	765	---	---	684	666
28	792	777	867	813	771	735	802	778	---	---	710	683
29	810	792	810	735	749	725	908	788	---	---	714	678
30	819	801	771	681	748	316	958	871	---	---	745	703
31	828	813	---	---	507	426	884	830	---	---	735	708
MONTH	954	359	900	681	825	316	958	507	1040	529	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	739	718	710	686	729	696	642	534	801	780	918	873
2	741	723	716	680	754	727	672	573	813	780	900	672
3	742	718	713	674	770	746	714	669	801	783	---	---
4	763	706	725	695	783	741	879	528	810	765	---	---
5	737	707	748	709	778	751	777	594	795	765	774	702
6	752	725	771	714	782	758	783	762	798	765	831	774
7	729	366	791	749	804	708	807	774	771	504	852	822
8	672	510	796	400	760	727	789	774	633	528	843	831
9	709	655	534	420	778	718	786	765	696	600	852	831
10	718	697	623	374	790	715	777	753	738	696	861	813
11	725	713	617	512	805	733	802	768	765	738	846	822
12	730	439	656	617	793	749	809	776	777	753	846	675
13	439	323	671	524	782	261	803	782	783	729	678	441
14	578	404	557	518	621	276	810	798	787	739	573	294
15	638	578	632	545	687	621	826	790	824	782	702	534
16	611	383	671	632	735	687	857	671	858	825	714	681
17	554	464	689	671	750	726	776	719	847	829	741	687
18	641	554	704	686	756	741	810	732	869	842	768	738
19	671	641	713	689	756	744	765	747	876	849	858	765
20	680	641	---	---	768	744	771	708	877	760	855	780
21	730	655	---	---	768	753	708	579	777	686	843	816
22	657	614	725	704	780	756	699	642	825	777	855	825
23	722	645	737	713	777	765	756	681	819	741	882	843
24	781	712	737	716	822	747	750	717	837	606	852	747
25	785	677	734	719	768	744	831	669	---	---	777	537
26	707	686	740	722	771	759	726	669	---	---	741	630
27	713	692	749	731	786	765	753	726	---	---	693	603
28	719	701	755	728	783	768	771	753	---	---	726	615
29	728	698	756	726	780	744	780	768	---	---	732	690
30	722	683	790	553	789	522	807	771	---	---	723	456
31	---	---	692	509	---	---	804	780	885	840	---	---
MONTH	785	323	796	374	822	261	879	528	885	504	918	294
YEAR	1040	261										

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.8	8.0	7.5	7.7	6.9	8.5	8.1	---	---	---	---
2	7.4	6.8	7.8	7.1	7.4	4.7	8.4	8.1	---	---	---	---
3	7.6	6.9	7.7	7.4	7.5	7.4	8.6	7.7	---	---	---	---
4	7.4	7.0	7.8	7.5	7.4	7.1	8.2	8.0	---	---	---	---
5	7.4	7.1	7.8	7.4	7.8	7.2	8.2	7.9	---	---	---	---
6	7.5	7.1	7.8	7.6	8.8	7.6	8.2	7.3	---	---	---	---
7	7.5	7.3	7.8	7.7	9.0	8.0	7.8	7.1	---	---	---	---
8	7.5	7.2	7.8	7.6	8.1	8.0	8.0	7.1	8.2	7.8	---	---
9	7.7	7.5	7.7	7.6	8.5	7.9	8.7	7.6	8.4	7.2	8.3	7.6
10	7.6	7.4	7.9	7.6	8.7	8.1	8.3	7.3	8.5	6.9	8.5	7.7
11	7.5	7.1	8.1	7.6	8.1	6.7	8.4	7.6	8.1	6.6	8.5	7.8
12	7.7	6.9	8.0	7.6	7.8	7.3	8.2	7.6	8.4	7.3	8.9	8.2
13	8.2	7.1	8.2	7.7	7.5	6.8	8.2	7.8	8.5	8.2	9.1	8.5
14	8.4	7.7	8.2	7.6	8.5	7.4	8.2	7.3	8.2	7.5	8.6	8.6
15	8.0	7.6	8.1	7.7	8.8	7.7	8.2	7.9	8.9	8.1	8.7	8.4
16	8.1	7.6	7.8	7.6	8.0	7.6	8.3	7.5	8.1	6.7	8.9	8.6
17	8.0	7.6	7.9	7.6	7.9	7.5	7.9	6.6	8.2	6.9	8.8	8.6
18	8.0	7.5	8.1	7.6	8.0	7.4	7.1	6.6	8.5	8.1	8.7	8.1
19	8.0	7.3	7.9	7.7	8.1	7.4	7.7	6.8	8.3	8.1	8.5	7.7
20	7.9	7.4	8.1	7.9	8.6	8.2	8.0	7.5	8.1	6.9	8.4	7.8
21	7.8	7.7	8.2	8.0	8.3	8.0	7.9	7.8	8.4	7.5	8.9	8.0
22	7.8	7.6	8.3	7.4	8.2	7.5	8.1	7.9	7.9	7.2	8.3	7.8
23	7.7	7.5	7.9	7.3	7.9	7.5	8.1	7.9	8.1	7.8	8.1	7.9
24	7.7	7.6	7.6	7.2	8.5	8.1	8.2	7.9	8.2	7.7	8.1	7.4
25	7.7	7.4	7.3	6.2	8.7	7.9	8.3	7.9	7.8	7.7	8.1	7.5
26	7.6	7.3	7.5	7.3	8.9	8.8	8.2	7.2	---	---	8.1	7.4
27	7.8	7.5	7.9	7.5	9.1	8.6	7.9	7.9	---	---	8.2	7.9
28	7.8	7.2	7.6	7.4	8.9	8.1	8.0	7.7	---	---	8.1	7.7
29	7.8	7.1	8.2	7.5	8.3	7.8	8.1	7.2	---	---	8.1	7.2
30	7.8	7.2	8.1	7.4	9.2	8.1	8.0	7.7	---	---	8.1	7.7
31	8.0	7.7	---	---	8.6	8.3	---	---	---	---	8.0	7.4
MONTH	8.4	6.8	8.3	6.2	9.2	4.7	8.7	6.6	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.9	7.7	8.6	8.3	---	---	8.3	7.4	8.2	7.8	8.3	7.8
2	7.8	7.6	8.5	7.8	---	---	8.2	7.9	8.1	7.8	8.3	7.8
3	7.8	7.4	8.1	7.8	---	---	8.4	8.0	8.0	7.8	8.2	8.0
4	7.7	7.3	7.9	7.8	---	---	8.2	8.0	8.2	7.9	8.0	7.8
5	7.5	7.2	7.9	7.6	---	---	8.3	8.1	8.2	7.7	7.9	7.5
6	7.7	7.1	7.9	7.7	---	---	8.4	7.9	8.2	7.9	8.0	7.4
7	7.5	7.1	8.1	7.8	---	---	8.3	7.9	8.0	7.6	8.0	7.3
8	7.1	6.7	8.2	7.8	---	---	8.3	8.0	8.1	7.8	7.9	7.5
9	7.0	6.4	7.9	7.7	---	---	8.4	8.0	8.1	7.8	7.9	7.6
10	7.4	7.0	7.8	7.3	---	---	8.6	8.0	8.2	7.6	8.0	7.4
11	7.4	6.7	7.9	7.4	---	---	8.4	7.9	8.2	7.5	7.9	7.5
12	7.5	6.7	7.9	7.5	---	---	8.3	8.0	8.1	7.6	7.8	7.5
13	7.5	6.6	8.1	7.8	---	---	8.3	8.0	8.1	7.4	7.6	6.9
14	7.6	7.0	8.0	7.6	---	---	8.2	8.0	8.1	7.5	7.9	7.6
15	7.9	7.6	7.9	7.8	---	---	8.4	8.2	8.1	7.8	7.9	7.3
16	7.8	7.4	8.1	7.8	7.9	7.6	8.4	8.0	8.1	7.5	7.9	7.5
17	7.4	6.3	8.3	7.8	8.1	7.7	8.4	7.9	8.1	7.5	7.8	7.2
18	7.3	6.7	8.2	7.7	8.1	7.7	8.3	8.0	8.0	7.6	7.9	7.6
19	7.8	7.3	8.1	7.9	8.1	7.6	---	---	8.1	7.7	8.1	7.7
20	7.9	7.6	---	---	8.0	7.8	8.0	7.5	8.1	7.6	8.2	7.6
21	7.9	7.7	---	---	8.2	7.9	8.1	7.3	8.0	7.5	8.3	7.7
22	8.0	7.2	---	---	8.1	8.1	7.9	7.4	8.1	7.8	8.3	7.8
23	7.9	7.3	8.1	7.7	8.4	8.0	8.1	7.8	8.0	7.5	8.3	7.9
24	7.9	7.4	8.0	7.6	8.4	7.9	8.2	7.8	7.9	7.5	8.1	7.7
25	7.7	7.3	7.9	7.6	8.2	7.8	8.2	7.7	8.0	7.4	7.7	7.3
26	7.9	7.2	7.8	7.6	8.2	7.8	8.2	7.8	8.1	7.7	7.6	7.5
27	7.8	7.1	7.8	7.6	8.1	7.7	8.2	7.8	8.2	8.1	8.0	7.6
28	7.8	7.3	7.8	7.5	8.2	7.9	8.2	8.0	8.3	7.8	8.0	7.5
29	8.5	7.6	7.9	7.2	8.5	8.0	8.2	8.0	8.4	7.5	7.8	7.5
30	8.6	8.4	7.6	6.8	8.3	7.8	8.2	7.9	8.3	7.8	7.9	7.6
31	---	---	7.7	7.2	---	---	8.2	7.8	8.4	7.7	---	---
MONTH	8.6	6.3	8.6	6.8	---	---	8.6	7.3	8.4	7.4	8.3	6.9
YEAR	9.2	4.7										

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.1	5.2	10.0	8.4	10.4	9.7	12.6	12.2	---	---
2	---	---	7.2	5.9	10.3	9.1	10.0	9.3	12.2	11.7	---	---
3	---	---	6.8	5.6	10.5	9.4	11.4	10.0	12.0	11.3	---	---
4	---	---	7.0	6.5	10.3	9.0	10.7	10.1	13.3	11.7	---	---
5	---	---	9.5	7.9	9.2	8.2	11.9	10.5	13.3	12.7	---	---
6	---	---	8.2	7.3	8.7	7.5	12.1	11.5	12.9	12.3	---	---
7	---	---	9.6	7.5	8.6	7.9	11.9	11.6	12.9	12.3	---	---
8	---	---	10.1	8.3	8.3	7.7	11.8	11.3	13.0	12.4	---	---
9	---	---	10.4	8.5	7.7	7.4	11.3	10.5	13.0	12.4	12.4	8.2
10	---	---	10.8	8.6	7.5	6.6	10.6	9.7	13.0	12.4	8.6	8.2
11	---	---	10.3	8.5	7.3	6.5	10.1	9.7	12.7	12.2	8.3	7.6
12	---	---	10.1	7.7	7.8	7.3	10.6	10.2	12.4	11.7	7.7	6.9
13	8.0	5.9	9.5	6.9	8.7	7.8	10.5	10.0	11.9	11.0	7.2	6.7
14	6.4	5.6	9.4	6.6	9.5	6.4	11.8	10.5	12.3	11.3	7.4	6.5
15	6.7	4.8	8.7	6.0	8.7	7.2	13.3	11.9	12.4	11.2	8.7	7.6
16	5.9	4.7	9.8	5.5	7.4	7.1	13.2	12.6	12.5	12.0	8.2	7.3
17	5.2	4.9	10.2	6.6	8.2	7.5	12.6	12.3	12.0	11.6	7.9	7.6
18	5.1	4.9	9.6	6.5	9.2	8.2	12.3	11.7	11.9	11.2	8.5	7.9
19	6.1	4.9	7.0	5.6	9.3	8.9	11.7	11.7	12.8	11.8	8.9	8.4
20	5.7	5.1	8.1	6.2	9.7	8.8	11.8	11.2	13.2	12.7	8.6	8.0
21	5.3	4.9	9.3	7.0	10.4	9.2	11.2	11.0	12.8	12.2	9.0	7.8
22	5.1	4.6	10.2	8.0	10.8	9.9	11.1	10.3	12.5	11.7	9.1	8.1
23	4.9	4.5	10.3	9.4	10.8	10.2	10.3	9.7	12.4	11.8	10.4	9.2
24	4.5	4.1	10.8	9.0	10.3	9.4	10.5	10.1	12.4	11.7	10.6	10.3
25	4.5	4.2	10.9	8.7	9.7	8.9	11.9	10.0	12.2	11.5	10.6	10.3
26	6.2	4.4	10.0	8.0	9.1	7.9	12.6	11.9	---	---	10.7	10.3
27	6.5	5.6	8.4	7.3	8.1	7.5	12.7	12.4	---	---	10.8	10.0
28	6.6	5.6	8.6	6.6	9.4	7.5	12.7	12.4	---	---	11.1	10.5
29	6.8	5.7	8.7	6.7	10.5	9.2	12.6	12.5	---	---	10.5	10.4
30	6.8	5.7	8.3	7.4	10.2	7.8	12.7	12.3	---	---	11.6	10.3
31	6.4	5.3	---	---	10.2	8.6	12.7	12.5	---	---	11.4	10.4
MONTH	---	---	10.9	5.2	10.8	6.5	13.3	9.3	13.3	11.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.7	9.9	7.7	6.8	7.5	7.2	6.5	5.4	6.8	5.4	6.7	5.2
2	11.6	10.2	6.9	6.3	7.2	6.7	5.7	5.1	5.9	5.0	5.8	4.7
3	12.1	10.5	8.3	6.4	6.8	6.5	5.6	5.2	5.9	4.8	5.9	4.8
4	10.9	9.8	7.6	7.2	6.5	6.2	5.6	5.1	5.7	4.8	5.2	4.7
5	11.6	9.8	7.0	6.5	6.5	6.0	5.5	4.6	5.7	4.8	6.5	5.2
6	10.9	8.7	6.7	6.2	6.1	5.7	5.2	3.6	5.4	4.8	5.3	4.2
7	11.0	8.2	6.5	5.9	6.3	5.5	4.8	3.4	5.2	4.8	4.8	3.8
8	12.1	11.2	6.6	5.0	6.4	5.9	5.0	3.8	5.3	4.8	4.2	3.8
9	11.8	11.0	7.0	5.6	6.3	5.8	5.2	4.4	5.4	4.6	4.9	4.0
10	10.9	10.2	8.0	7.2	5.8	5.3	5.0	4.5	5.9	4.4	5.1	4.2
11	10.1	9.3	7.9	7.2	6.4	5.2	5.4	4.3	5.9	4.5	5.2	4.4
12	9.4	8.1	7.4	6.7	6.1	4.7	5.6	4.5	5.8	5.0	4.7	3.7
13	8.1	6.3	7.2	6.8	6.4	4.7	5.6	4.6	5.9	5.0	4.2	3.6
14	8.5	7.3	7.3	6.7	5.7	5.3	5.8	5.0	5.9	2.8	4.5	4.2
15	8.8	8.3	7.9	6.9	5.9	5.6	5.5	5.0	5.1	4.7	5.0	4.4
16	9.2	7.4	8.2	6.2	6.4	5.8	6.1	5.6	5.1	4.0	5.2	4.7
17	8.9	7.5	6.3	5.8	6.5	6.2	6.4	5.7	4.6	3.8	5.3	4.7
18	8.9	8.1	6.1	5.3	6.7	6.3	6.8	5.9	4.7	4.0	5.8	4.7
19	8.3	7.9	5.4	5.1	7.3	6.3	7.1	5.4	4.3	3.9	5.3	5.1
20	8.2	7.6	---	---	6.6	6.2	6.5	5.6	4.7	4.1	5.6	4.4
21	9.0	8.1	---	---	6.5	6.2	5.9	5.3	5.1	4.3	6.0	4.8
22	8.7	7.8	---	---	6.4	6.3	5.7	5.0	5.9	4.9	6.1	4.9
23	7.8	7.4	5.6	5.3	6.8	6.3	6.8	5.4	4.9	3.0	6.0	5.1
24	7.8	7.4	5.5	5.4	6.8	6.6	6.7	5.4	5.3	2.8	5.6	5.0
25	10.0	7.8	5.6	5.4	7.3	6.6	5.7	5.2	4.8	4.2	5.6	4.6
26	9.7	9.2	5.7	5.6	7.7	6.7	7.4	4.8	5.4	4.2	5.4	4.7
27	9.4	8.8	5.9	5.7	7.7	6.5	8.2	6.5	4.4	3.6	5.6	5.0
28	8.8	8.2	6.2	6.0	6.3	5.4	8.6	6.4	5.7	3.8	6.1	5.1
29	8.5	8.0	6.6	6.1	6.0	5.4	8.8	6.6	5.3	4.1	6.2	5.9
30	8.0	7.5	6.5	5.2	6.1	5.4	8.8	6.7	6.2	3.8	7.5	6.0
31	---	---	7.1	5.3	---	---	7.8	6.6	6.5	4.8	---	---
MONTH	12.1	6.3	8.3	5.0	7.7	4.7	8.8	3.4	6.8	2.8	7.5	3.6
YEAR	13.3	2.8										

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.5	21.0	16.5	14.5	5.0	3.5	5.0	3.5	2.5	0.0	---	---
2	24.0	20.0	19.5	16.5	5.5	2.5	5.5	4.5	3.5	2.0	---	---
3	23.5	20.0	17.0	13.0	3.0	1.5	5.5	3.0	3.5	1.0	---	---
4	23.5	20.5	13.0	10.0	4.5	2.0	5.0	4.0	1.0	0.0	---	---
5	21.5	18.5	12.0	8.5	6.0	4.5	4.0	2.0	0.0	0.0	---	---
6	19.5	17.0	10.0	8.0	9.5	6.0	1.5	0.5	0.0	0.0	---	---
7	17.5	14.5	8.0	5.5	10.0	8.0	2.0	0.5	1.0	0.0	---	---
8	15.5	12.0	6.5	3.5	9.0	8.5	2.5	0.5	0.5	0.0	---	---
9	14.5	13.0	6.0	5.0	9.5	8.5	4.5	2.5	0.5	0.0	4.0	2.5
10	13.0	11.5	8.5	6.0	11.5	9.5	6.5	4.0	0.5	0.0	5.5	1.0
11	15.0	10.5	11.0	6.0	11.5	8.5	7.0	5.0	2.5	0.0	9.0	3.0
12	15.0	10.5	11.5	7.5	8.5	6.5	5.0	3.5	4.5	1.0	12.5	8.0
13	15.5	14.5	---	---	7.5	6.0	6.0	3.5	4.0	2.5	12.5	11.0
14	17.0	13.0	---	---	6.5	5.5	3.5	0.5	4.5	2.0	11.0	6.5
15	17.0	13.0	---	---	11.0	6.5	0.5	0.0	3.0	1.5	7.0	5.5
16	18.0	15.5	---	---	10.5	9.0	0.0	0.0	3.5	1.0	9.0	7.0
17	18.5	15.5	---	---	9.0	4.5	0.0	0.0	5.0	2.0	8.5	6.5
18	19.5	16.0	---	---	4.5	2.0	0.0	0.0	4.5	3.0	8.5	5.5
19	19.5	15.0	---	---	2.5	1.5	4.0	0.0	3.0	1.0	9.5	5.5
20	19.5	15.5	---	---	5.0	2.5	4.5	3.0	2.5	0.0	11.5	7.0
21	18.5	16.5	9.0	5.0	6.0	5.0	4.0	3.5	3.5	1.0	13.0	9.5
22	18.5	17.0	7.0	3.0	5.5	4.0	7.0	4.0	5.5	2.5	11.5	7.0
23	18.0	17.0	4.0	2.0	5.0	3.5	7.0	6.0	3.0	2.0	7.0	3.0
24	17.5	17.0	4.0	2.0	7.0	5.0	8.0	5.5	3.0	2.0	6.0	2.5
25	18.0	16.5	6.0	3.5	7.0	5.0	7.5	1.5	3.5	2.0	6.0	4.0
26	17.5	16.0	5.0	3.5	9.5	7.0	2.5	0.0	---	---	8.0	3.5
27	17.0	13.5	5.5	4.5	11.5	9.0	0.5	0.0	---	---	9.0	7.0
28	18.0	14.0	6.5	5.5	11.0	6.0	1.0	0.0	---	---	11.0	7.0
29	18.0	13.5	6.5	5.5	6.0	4.5	0.5	0.0	---	---	9.0	6.5
30	18.0	13.5	6.5	5.0	9.0	5.5	0.0	0.0	---	---	9.5	5.5
31	17.0	15.0	---	---	8.5	4.5	0.5	0.0	---	---	11.0	6.0
MONTH	24.5	10.5	---	---	11.5	1.5	8.0	0.0	5.5	0.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.0	17.5	14.5	16.5	12.0	22.0	17.5	22.5	19.5	24.5	21.0
2	7.0	5.5	19.5	15.5	19.5	14.5	21.0	19.0	22.5	20.0	23.5	21.0
3	8.5	4.5	19.0	16.0	21.5	16.5	21.5	19.0	23.5	20.5	22.0	18.5
4	11.5	7.5	18.0	15.5	24.0	18.5	20.0	18.0	22.5	20.0	18.5	17.5
5	12.5	7.0	18.0	13.0	23.5	19.0	20.0	16.5	23.0	18.0	20.5	17.5
6	15.5	9.5	20.0	15.0	21.5	19.5	20.0	15.0	20.0	17.5	20.5	15.5
7	13.5	3.5	20.5	17.0	22.5	17.5	19.5	15.0	21.0	19.0	20.5	16.0
8	4.5	2.0	19.0	16.0	21.5	17.5	19.5	16.0	20.0	18.0	19.5	18.0
9	8.0	2.5	16.0	12.5	20.5	17.5	21.0	17.0	20.0	17.0	21.0	17.5
10	10.0	6.5	13.5	10.5	20.5	17.0	22.0	18.5	21.0	15.5	20.0	16.0
11	14.5	10.5	16.5	11.5	20.0	14.5	24.0	19.0	21.5	15.5	20.5	16.5
12	16.0	13.0	17.5	13.5	19.5	15.0	25.0	20.5	23.0	18.0	20.5	19.0
13	19.0	15.5	16.5	14.5	20.0	17.5	25.5	21.0	24.5	19.0	24.0	19.5
14	18.0	15.0	17.0	14.0	23.0	19.0	26.0	21.5	24.5	19.5	22.5	20.5
15	15.5	14.0	17.0	15.0	22.0	20.0	24.0	22.0	23.0	21.5	22.0	18.0
16	16.0	14.0	16.0	14.5	22.0	18.5	22.5	21.0	24.0	19.0	20.5	17.5
17	16.0	12.5	17.0	13.5	22.0	18.5	24.5	21.0	25.0	20.5	22.0	18.0
18	17.0	12.5	19.0	15.0	23.0	18.0	25.5	21.5	27.0	22.5	22.0	19.5
19	16.0	15.0	20.0	16.5	24.5	19.5	26.0	22.5	25.0	22.5	22.5	20.0
20	15.0	12.5	---	---	23.0	21.0	27.5	22.5	25.0	21.0	22.0	18.0
21	12.5	10.0	---	---	21.5	18.5	27.5	23.5	25.5	20.5	20.5	17.0
22	13.0	10.5	---	---	18.5	15.5	27.5	23.0	23.5	21.0	20.0	17.0
23	14.0	12.0	23.0	18.5	15.5	13.5	28.0	22.5	25.0	21.5	18.0	16.0
24	13.0	11.5	23.0	18.0	14.0	13.0	26.5	23.0	24.0	21.0	18.5	17.5
25	13.0	9.5	23.5	18.5	16.0	13.0	25.5	22.0	25.5	21.0	20.5	18.0
26	14.0	9.5	23.5	19.0	19.5	14.0	24.0	20.0	25.5	22.0	20.5	19.0
27	15.5	11.0	22.0	18.5	22.5	16.5	24.0	20.5	23.5	22.0	20.0	19.0
28	15.0	12.0	22.0	17.0	21.0	18.0	23.0	20.5	25.0	20.5	19.5	18.5
29	16.0	13.0	20.5	17.5	19.5	17.5	22.0	19.0	25.0	20.0	19.0	17.5
30	16.0	13.5	18.5	17.5	19.0	17.5	22.5	18.5	25.0	20.5	17.5	13.5
31	---	---	17.5	13.5	---	---	23.5	19.5	24.5	20.0	---	---
MONTH	19.0	2.0	23.5	10.5	24.5	12.0	28.0	15.0	27.0	15.5	24.5	13.5
YEAR	28.0	0.0										

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO

LOCATION.--Lat 39°30'27", long 84°00'42", Warren County, at gaging station on right bank at downstream side of bridge on State Highway 73, 0.2 mile north of Harveysburg, 2.3 miles downstream from Turkey Run, and 3.1 miles upstream from Jonahs Run.

DRAINAGE AREA.--209 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-67, 1969, July to September 1970 (partial-record station); November 1970 to September 1972.
Water temperatures: December 1970 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 801 micromhos Jan. 17; minimum, 263 micromhos Apr. 13.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT. 13...	1415	13	4.7	140	60	0	0	94	29
DEC. 01...	1315	113	10	470	130	0	0	84	33
JAN. 14...	1515	180	5.2	100	100	18	18	92	32
FEB. 17...	1200	400	5.4	330	190	8	7	71	30
APR. 04...	1630	210	11	180	20	46	40	100	35
MAY 12...	1205	390	8.6	430	120	50	37	74	32
JUNE 30...	1155	67	2.7	40	20	36	28	75	32
AUG. 10...	1115	6.6	7.0	120	70	46	26	72	33
SEP. 20...	1415	5.7	7.6	140	60	45	24	61	27

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT. 13...	393	398	350	74	663	7.6	14.0	8
DEC. 01...	414	403	340	84	663	8.0	3.5	12
JAN. 14...	421	412	360	97	674	8.2	3.0	7
FEB. 17...	382	352	300	86	582	7.9	2.5	10
APR. 04...	434	442	390	120	700	7.7	10.5	5
MAY 12...	364	353	320	89	599	8.0	15.0	5
JUNE 30...	390	356	320	78	604	8.1	--	10
AUG. 10...	351	345	320	71	584	7.9	--	5
SEP. 20...	314	303	260	54	514	7.9	21.5	10

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

EXTREMES.--1971-72--Continued
Water temperatures: Maximum, 30.0°C Aug. 18; minimum, freezing point on many days during January and February.

Period of record:
Specific conductance (December 1970 to September 1972): Maximum, 801 micromhos Jan. 17, 1972; minimum, 171 micromhos June 26, 1971.
Water temperatures: Maximum, 30.5°C June 6, 1971; minimum, freezing point on many days during winter months.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate monthly basis to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.									
13...	10	2.8	337	0	62	27	.3	1.6	--
DEC.									
01...	12	3.7	319	0	51	31	.2	4.7	21
JAN.									
14...	7.4	1.2	322	0	58	28	.2	6.8	30
FEB.									
17...	7.7	2.0	262	0	51	24	.2	7.3	32
APR.									
04...	5.2	1.6	340	0	92	16	.5	3.1	14
MAY									
12...	6.4	1.4	277	0	47	20	.3	6.1	27
JUNE									
30...	7.3	1.5	294	0	48	22	.2	5.1	23
AUG.									
10...	8.8	2.2	298	0	50	21	.3	1.0	4.5
SEP.									
20...	11	4.1	256	0	42	20	.3	.80	3.7

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	695	644	672	650	684	630	732	711	645	609
2	---	---	644	470	687	665	689	665	711	683	609	455
3	---	---	473	464	698	684	688	661	687	641	594	510
4	---	---	477	466	704	693	693	675	581	643	623	594
5	---	---	482	474	708	699	682	655	712	681	643	618
6	---	---	489	482	703	575	700	676	738	708	659	639
7	---	---	496	489	578	507	714	695	734	714	661	647
8	---	---	508	496	597	513	717	702	740	715	658	650
9	---	---	523	508	649	597	709	631	740	717	661	647
10	---	---	566	519	678	627	656	626	744	723	665	654
11	---	---	580	538	687	638	686	653	733	702	669	661
12	---	---	587	574	681	666	698	679	710	679	669	661
13	655	642	584	573	690	677	704	692	688	642	665	650
14	644	637	573	567	691	462	702	689	642	502	650	634
15	644	640	582	565	603	462	750	681	502	403	659	641
16	644	631	589	576	649	603	782	734	524	416	659	587
17	633	593	592	584	676	634	801	766	610	524	569	550
18	613	482	602	591	685	665	768	688	627	607	619	575
19	618	553	603	593	690	681	688	630	635	620	643	618
20	643	618	600	592	687	668	638	625	662	635	652	641
21	665	641	626	600	686	670	661	630	669	644	654	584
22	670	659	627	617	695	684	697	661	656	642	584	436
23	674	668	630	621	698	689	694	678	656	641	580	503
24	670	663	640	627	705	696	697	657	650	639	616	580
25	674	661	649	640	702	695	691	673	652	645	632	609
26	690	674	657	646	698	691	687	664	652	636	630	609
27	692	673	657	652	700	694	698	678	645	632	639	619
28	698	688	663	656	697	681	707	693	643	634	641	634
29	702	668	669	644	691	680	718	694	649	632	659	632
30	698	691	653	617	692	430	720	709	---	---	656	650
31	698	688	---	---	630	490	743	716	---	---	654	638
MONTH	---	---	695	464	708	430	801	625	744	403	669	436

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	643	632	618	609	621	577	619	600	605	583	527	514
2	639	625	612	595	634	621	621	589	607	598	531	521
3	634	614	603	591	636	630	601	580	605	600	527	506
4	623	587	612	594	638	625	619	601	605	591	522	517
5	616	591	612	605	636	621	619	610	595	587	520	510
6	623	610	619	605	632	612	618	605	594	584	527	517
7	612	572	621	605	621	609	614	598	592	583	539	525
8	---	---	610	315	623	609	605	595	591	583	538	525
9	---	---	438	349	625	609	598	594	595	586	533	527
10	---	---	531	438	625	610	594	578	597	586	536	530
11	---	---	575	531	621	609	595	578	592	581	536	518
12	---	---	610	575	618	603	594	580	592	575	536	376
13	349	263	618	469	619	315	591	577	586	572	376	304
14	446	349	534	449	559	340	581	564	581	564	391	345
15	530	446	580	534	623	559	572	492	575	558	443	391
16	534	332	612	580	587	509	492	452	566	552	468	443
17	496	385	619	612	548	527	524	484	561	539	495	468
18	573	496	621	614	605	531	552	524	552	536	509	495
19	594	567	619	610	643	605	562	552	548	527	516	509
20	592	570	614	605	652	643	572	562	550	533	524	516
21	607	507	618	607	676	652	581	572	556	542	534	521
22	510	457	614	607	652	650	586	577	559	550	539	527
23	572	510	614	603	652	645	583	569	564	552	534	528
24	609	572	616	603	650	647	578	556	553	430	538	525
25	625	607	621	601	654	643	566	550	430	397	539	524
26	630	618	621	598	645	629	566	561	406	392	534	521
27	634	621	623	601	632	618	573	562	449	406	521	496
28	629	621	621	601	618	605	577	570	468	449	498	468
29	629	623	623	605	607	581	580	573	486	468	514	482
30	625	610	623	456	601	592	583	578	503	486	511	377
31	---	---	580	460	---	---	584	578	517	502	---	---
MONTH	643	263	623	315	676	315	621	452	607	392	539	304
YEAR	801	263										

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	16.0	14.5	4.0	2.5	5.0	3.5	0.0	0.0	11.0	9.5
2	---	---	18.0	16.0	2.5	1.0	6.0	5.0	0.0	0.0	11.0	5.0
3	---	---	16.5	13.0	1.5	0.5	5.0	3.0	0.0	0.0	5.0	3.0
4	---	---	13.0	9.5	2.5	1.0	5.5	4.5	0.0	0.0	4.5	3.5
5	---	---	10.5	8.5	4.5	2.5	4.5	2.0	0.0	0.0	4.0	2.0
6	---	---	9.5	7.5	7.5	4.5	2.0	0.5	0.0	0.0	3.0	0.5
7	---	---	7.5	5.0	9.5	7.5	1.5	0.0	0.0	0.0	6.5	3.0
8	---	---	5.0	3.0	9.5	9.0	2.0	0.0	0.0	0.0	6.0	4.0
9	---	---	4.5	3.5	9.5	8.5	4.5	2.0	0.0	0.0	4.0	1.5
10	---	---	6.0	4.5	12.0	9.5	6.5	4.5	0.0	0.0	4.0	1.0
11	---	---	6.5	4.5	11.5	8.5	6.5	5.5	0.0	0.0	8.0	3.0
12	---	---	7.5	5.5	8.5	6.5	5.5	3.5	0.0	0.0	11.0	8.0
13	16.5	15.5	9.5	7.5	7.0	6.0	5.5	4.0	0.0	0.0	12.0	11.0
14	17.5	15.0	11.5	8.5	6.5	5.5	4.0	0.5	0.0	0.0	11.0	6.5
15	17.5	15.0	13.0	11.0	11.0	6.5	0.5	0.0	0.5	0.0	6.5	5.0
16	18.5	17.0	13.5	12.0	10.5	9.0	0.0	0.0	2.5	0.0	8.5	6.5
17	18.0	16.5	13.5	11.5	9.0	5.0	0.0	0.0	4.0	1.5	8.0	6.0
18	19.5	17.5	13.5	11.5	5.0	2.0	0.0	0.0	4.5	3.5	8.0	5.0
19	19.0	17.0	13.5	10.0	2.5	1.0	0.0	0.0	3.5	0.5	8.5	5.0
20	19.0	16.5	9.5	8.0	5.0	2.5	1.5	0.0	1.0	0.0	10.5	6.5
21	19.0	17.5	8.0	5.0	5.5	5.0	2.5	1.5	3.0	0.0	11.5	9.5
22	18.5	18.0	5.0	3.5	5.0	3.0	5.5	2.5	4.0	2.5	11.5	6.0
23	18.5	18.0	3.5	2.0	4.0	2.5	6.0	5.0	2.5	1.5	6.0	3.0
24	18.0	17.5	3.0	2.0	6.0	4.0	7.0	5.0	3.0	2.0	6.0	2.5
25	17.5	17.0	4.5	2.0	6.5	5.0	6.5	1.0	4.5	2.0	5.5	3.5
26	17.5	16.5	3.5	2.5	8.5	6.5	1.0	0.0	4.5	3.5	7.5	3.0
27	17.5	15.0	5.0	3.5	10.5	8.5	0.0	0.0	5.0	2.5	8.0	6.5
28	17.5	15.5	5.5	4.5	10.5	6.0	0.0	0.0	6.5	4.5	9.5	6.5
29	17.0	14.5	5.5	5.0	6.0	4.0	0.0	0.0	9.5	6.5	8.5	7.0
30	17.0	13.0	5.5	4.0	10.0	5.0	0.0	0.0	---	---	9.5	6.5
31	17.0	15.0	---	---	8.5	4.5	0.0	0.0	---	---	10.0	7.0
MONTH	---	---	18.0	2.0	12.0	0.5	7.0	0.0	9.5	0.0	12.0	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.5	18.0	15.5	17.0	13.0	24.0	19.5	25.0	22.5	25.5	22.5
2	7.5	6.5	20.0	17.0	20.0	16.0	23.5	22.0	25.5	23.0	25.5	22.5
3	9.0	5.5	19.5	17.0	22.5	18.0	24.0	22.0	26.0	24.0	23.5	21.0
4	10.5	8.0	18.0	16.0	24.5	20.5	22.5	20.5	25.0	23.5	21.5	20.0
5	11.0	7.0	17.5	13.5	24.5	21.0	22.5	19.5	25.5	21.0	23.5	19.0
6	13.5	9.5	20.0	15.5	23.5	21.0	21.0	18.0	23.0	21.0	23.0	18.5
7	13.0	3.0	20.5	17.5	23.5	19.5	21.0	17.5	24.5	22.0	24.0	19.0
8	5.5	2.0	19.5	15.5	22.0	19.5	21.5	19.0	23.0	21.0	22.5	21.0
9	9.0	3.0	15.5	12.5	22.0	19.5	23.0	19.5	24.0	20.5	24.0	20.5
10	10.5	7.0	15.0	11.0	22.0	19.0	23.5	21.0	24.0	19.0	23.0	19.0
11	13.5	10.5	16.5	13.0	20.5	16.5	25.0	21.5	24.0	19.0	24.0	19.5
12	15.5	12.5	18.0	14.0	21.0	17.0	26.5	22.5	25.5	21.5	24.0	21.5
13	18.5	15.0	17.5	14.5	20.5	18.5	27.0	23.5	27.5	22.5	24.0	21.5
14	18.0	14.5	17.5	14.0	23.0	19.0	27.0	24.5	27.0	22.5	24.0	23.0
15	15.0	14.0	17.5	15.5	22.5	21.5	26.0	24.5	26.0	24.5	23.5	21.0
16	15.5	14.0	16.0	15.0	22.0	19.5	24.5	23.5	27.5	22.0	22.5	20.5
17	15.5	12.0	18.0	14.0	22.0	19.0	25.5	23.0	28.5	24.0	23.5	21.0
18	17.0	13.0	19.5	15.0	23.0	19.5	27.5	24.0	30.0	25.5	24.5	22.0
19	16.5	14.5	21.0	17.5	24.5	21.0	27.5	25.0	27.5	25.5	25.0	22.0
20	14.5	13.5	21.0	18.5	24.5	23.0	29.0	25.0	28.0	24.0	23.5	20.5
21	13.5	11.0	22.5	18.5	23.0	20.0	29.5	26.5	28.5	23.5	23.0	19.0
22	14.5	11.0	23.0	19.5	20.0	16.5	29.5	26.5	26.5	24.0	22.0	19.0
23	15.0	12.5	24.0	20.0	16.5	14.5	29.5	26.0	28.0	24.5	20.0	18.0
24	14.0	12.5	23.5	19.5	14.5	13.5	28.5	26.0	26.0	24.0	20.0	19.5
25	14.0	10.5	24.5	20.0	16.0	14.0	27.5	25.0	26.5	23.5	21.0	19.5
26	14.5	10.5	24.5	20.5	19.5	15.0	25.5	23.0	26.5	24.5	21.5	20.5
27	16.0	11.5	23.0	20.0	22.5	18.0	26.5	24.0	25.5	23.5	21.0	20.0
28	14.5	13.0	22.5	19.0	21.5	20.5	25.5	24.0	26.0	22.0	20.0	19.0
29	16.0	13.5	22.0	20.0	21.0	20.0	24.5	22.5	27.0	21.5	19.5	18.0
30	16.5	14.5	20.5	18.0	20.5	19.5	24.0	21.5	26.5	22.0	18.5	14.5
31	---	---	18.0	14.0	---	---	25.0	22.5	26.5	21.5	---	---
MONTH	18.5	2.0	24.5	11.0	24.5	13.0	29.5	17.5	30.0	19.0	25.5	14.5
YEAR	30.0	0.0										

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO

LOCATION.--Lat 39°12'38", long 84°17'33", Hamilton County, on right bank at upstream side of bridge on State Highway 126, 0.4 mile southeast of Miamiville, 4.2 miles upstream from gaging station at Milford, 5.6 miles upstream from East Fork Little Miami River, and 1.0 mile north of Camp Dennison.

DRAINAGE AREA.--1,189 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.
Water temperatures: November 1970 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 974 micromhos Feb. 13; minimum, 243 micromhos Apr. 13.
pH: Maximum, 9.2 July 26; minimum, 6.6 July 1.
Dissolved oxygen: Maximum, 15.0 mg/l on several days during January, February and April; minimum, 3.5 mg/l July 13.
Water temperatures: Maximum, 32.5°C July 23; minimum, freezing point on many days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
11...	0800	1560	300	20	58	51	.2	1.8
14...	1600	--	--	--	--	--	--	--
18...	0810	2750	200	0	41	28	.2	2.0
NOV.								
08...	1315	261	276	16	54	46	.3	2.2
26...	1115	1590	340	0	58	51	.2	2.4
DEC.								
08...	1105	9680	178	0	45	23	.1	4.3
27...	--	886	324	0	59	33	.2	3.5
JAN.								
05...	1100	7250	218	4	56	29	.2	2.8
31...	0810	340	338	0	64	47	.2	3.3
FEB.								
02...	1102	460	344	0	62	57	.2	3.6
16...	1115	7400	160	0	36	32	.2	2.6
MAR.								
13...	1410	3010	292	8	62	34	.2	3.9
22...	1110	16400	179	0	47	19	.1	3.0
APR.								
17...	0810	17100	174	0	36	15	.3	2.8
28...	1410	3760	172	4	59	27	.2	3.9
MAY								
10...	1110	12000	190	0	41	17	.3	3.8
30...	1125	2580	292	12	59	32	.3	2.5
JUNE								
14...	1445	--	--	--	--	--	--	--
16...	1120	11400	140	0	29	13	.2	3.5
28...	1045	435	282	24	58	36	.2	3.0
JULY								
03...	1305	549	255	0	49	28	.2	3.1
31...	0810	171	327	0	56	46	.2	2.7
AUG.								
04...	1115	2230	238	0	45	34	.2	1.6
25...	1100	1550	350	0	59	53	.2	1.9
SEP.								
08...	1010	1380	328	0	62	54	.2	2.1
18...	0815	1490	204	0	43	34	.2	2.0

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum, 974 micromhos Feb. 13, 1972; minimum, 158 micromhos Sept. 12, 1971.
pH (1971-72): Maximum, 9.2 July 26, 1972; minimum, 6.6 July 1, 1972.
Dissolved oxygen: Maximum, 15.0 mg/l on many days during 1971 and 1972; minimum, 0.8 mg/l May 17, 1971.
Water temperatures: Maximum, 32.5°C July 23, 1972; minimum, freezing point on many days during winter months.

REMARKS.--Continuous water-quality recorder operated since November 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater due to instrument limitation. Maximum recorded pH of 9.3 occurred June 26, 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Little Miami River at Milford, Ohio (station 03245500, drainage area 1,203 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
11...	8.0	434	340	60	753	--	--
14...	--	--	--	--	--	<.5	10
18...	8.8	280	210	46	473	--	--
NOV.							
08...	9.7	410	320	67	680	--	--
26...	10	452	350	71	755	--	--
DEC.							
08...	19	300	220	74	463	--	--
27...	15	420	350	84	691	--	--
JAN.							
05...	12	340	270	84	540	--	--
31...	15	468	370	92	755	--	--
FEB.							
02...	16	520	380	98	797	--	--
16...	12	292	190	59	436	--	--
MAR.							
13...	17	432	340	87	682	--	--
22...	14	272	210	64	421	--	--
APR.							
17...	13	242	190	48	382	--	--
28...	17	298	240	92	491	--	--
MAY							
10...	17	268	220	64	445	--	--
30...	11	404	340	80	673	--	--
JUNE							
14...	--	--	--	--	--	<.5	23
16...	15	218	170	56	338	--	--
28...	13	434	350	78	701	--	--
JULY							
03...	14	370	280	70	574	--	--
31...	12	456	350	82	729	--	--
AUG.							
04...	7.0	334	250	55	553	--	--
25...	8.3	484	370	82	778	--	--
SEP.							
08...	9.4	484	350	80	768	--	--
18...	8.8	324	230	63	515	--	--

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	657	626	---	---	650	621	519	468	800	788	671	599
2	638	620	770	765	638	624	612	519	843	800	599	449
3	669	632	774	768	624	602	638	612	911	801	542	462
4	702	669	---	---	630	594	639	587	830	785	614	542
5	719	702	---	---	599	594	594	558	788	765	644	614
6	729	714	---	---	612	429	648	594	773	758	681	644
7	743	726	---	---	483	438	726	648	828	773	699	681
8	752	738	712	708	512	448	758	726	845	819	710	689
9	756	737	710	698	600	512	767	564	831	819	698	681
10	749	725	729	704	639	600	584	560	834	809	698	690
11	750	743	743	726	653	632	630	584	869	810	701	696
12	759	740	754	741	681	653	672	630	906	869	710	701
13	766	758	762	748	692	681	701	672	974	840	717	705
14	767	737	760	742	698	599	722	701	840	585	722	693
15	775	755	762	745	599	455	746	720	585	468	696	681
16	784	703	771	757	536	458	780	746	476	435	687	525
17	715	497	772	760	621	518	792	780	506	476	545	507
18	502	452	771	759	666	621	791	783	558	504	600	533
19	541	492	771	753	690	666	786	755	620	558	650	605
20	594	540	764	756	693	681	755	719	657	620	677	651
21	---	---	773	764	686	678	719	705	684	656	683	585
22	---	---	785	771	680	672	708	701	701	681	585	414
23	---	---	785	777	680	674	705	690	848	695	554	456
24	---	---	786	774	695	680	702	663	957	638	603	554
25	---	---	784	774	720	695	663	648	651	621	650	603
26	---	---	788	777	725	717	672	654	669	603	680	650
27	---	---	785	759	726	722	702	672	654	615	689	680
28	---	---	767	752	722	705	760	702	656	633	693	684
29	---	---	752	655	722	711	840	760	659	650	702	693
30	---	---	655	588	722	414	770	760	---	---	703	695
31	---	---	---	---	498	398	790	770	---	---	707	695
MONTH	---	---	788	588	726	398	840	468	974	435	722	414

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	713	698	648	608	522	492	564	512	702	659	647	630
2	710	698	633	615	587	509	624	524	687	636	683	627
3	707	690	638	626	633	587	606	536	690	636	639	602
4	692	552	647	638	651	633	576	537	690	440	603	585
5	623	599	650	645	674	638	612	539	585	432	683	597
6	635	585	656	647	684	672	---	---	621	585	737	683
7	605	284	659	642	681	675	647	638	638	594	759	734
8	423	285	656	257	687	681	678	647	683	596	765	756
9	510	423	390	278	692	683	678	654	705	683	762	723
10	564	510	456	390	692	674	689	660	740	704	731	687
11	599	564	504	432	683	675	702	667	747	732	699	638
12	618	599	575	504	689	681	705	690	750	698	641	603
13	618	243	594	414	696	672	708	695	702	602	734	618
14	404	264	461	407	672	287	707	698	624	602	789	645
15	495	404	525	461	456	285	705	698	627	603	645	509
16	506	311	569	525	356	255	708	702	639	615	522	506
17	443	324	603	569	515	356	707	699	678	636	522	488
18	524	443	617	603	564	515	785	693	696	654	513	488
19	564	524	630	617	597	564	705	680	705	675	566	504
20	524	458	638	630	626	597	707	657	708	581	615	566
21	545	486	644	638	636	557	702	648	716	680	645	615
22	486	435	648	638	653	636	653	636	722	683	684	638
23	519	449	653	636	666	638	662	596	722	696	696	638
24	570	519	654	638	677	666	650	624	740	702	701	513
25	614	570	659	638	687	677	678	629	743	711	678	594
26	641	614	668	638	692	686	636	600	756	618	689	585
27	650	641	674	639	699	687	635	600	723	639	690	630
28	654	648	674	639	708	695	639	623	726	693	681	623
29	659	651	657	638	---	---	693	636	726	678	678	560
30	657	648	663	512	587	557	702	693	702	636	603	552
31	---	---	545	429	---	---	714	698	680	618	---	---
MONTH	713	243	674	257	708	255	785	512	756	432	789	488
YEAR	974	243										

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.9	7.7	---	---	8.0	7.9	8.1	7.9	8.5	8.3	8.5	8.2
2	7.9	7.8	8.3	8.2	8.2	8.0	8.2	8.0	8.6	8.1	7.9	7.9
3	8.0	7.8	8.3	8.3	8.2	8.1	8.3	7.8	8.5	8.2	8.1	7.9
4	8.1	7.8	---	---	8.2	8.1	8.2	8.1	8.5	8.4	8.1	8.1
5	8.1	7.9	---	---	8.2	8.1	8.4	8.2	8.5	8.2	8.2	8.1
6	8.2	7.8	---	---	8.1	7.7	8.3	8.1	8.4	8.2	8.3	8.3
7	8.2	8.0	---	---	7.8	7.6	8.3	8.0	8.7	8.2	8.3	8.1
8	8.1	8.0	8.2	8.1	7.8	7.6	8.3	8.0	8.5	8.2	8.4	8.2
9	8.1	8.0	8.2	8.1	7.9	7.8	8.2	8.0	8.7	8.2	8.4	8.3
10	8.1	7.9	8.2	8.2	8.3	7.9	8.3	7.8	8.5	8.1	8.5	8.3
11	8.1	8.0	8.2	8.2	8.1	7.8	8.2	8.0	8.4	7.7	8.5	7.8
12	8.1	8.0	8.2	8.1	8.2	7.9	8.2	7.9	8.4	7.8	8.3	8.1
13	8.0	7.9	8.2	8.1	8.2	8.1	8.3	8.2	8.4	8.2	8.5	8.2
14	8.0	7.9	8.2	8.1	8.2	7.9	8.4	8.2	8.4	7.8	---	---
15	8.1	8.0	8.3	8.2	8.0	7.8	8.5	8.4	8.2	8.0	---	---
16	8.1	8.0	8.3	8.2	7.9	7.8	8.5	8.4	8.0	7.6	---	---
17	8.1	7.6	8.4	8.3	8.3	7.9	8.4	8.2	8.1	7.4	---	---
18	7.6	7.5	8.5	8.3	8.2	8.1	8.3	8.1	8.2	8.0	---	---
19	7.7	7.6	8.3	8.1	8.2	8.1	8.2	7.8	8.3	8.2	---	---
20	7.8	7.7	8.2	8.1	8.1	8.0	8.2	8.1	8.4	8.0	---	---
21	---	---	8.1	8.0	8.1	8.1	8.3	8.2	8.6	8.2	---	---
22	---	---	8.1	8.0	8.2	8.1	8.3	8.1	8.5	8.2	---	---
23	---	---	8.1	8.0	8.3	8.1	8.3	8.2	8.5	8.4	---	---
24	---	---	8.1	8.0	8.2	8.0	8.2	8.1	8.4	8.2	---	---
25	---	---	8.2	8.1	8.2	8.1	8.3	8.2	8.4	8.3	---	---
26	---	---	8.2	8.1	8.1	8.0	8.4	8.2	8.4	8.3	8.4	8.0
27	---	---	8.2	8.1	8.0	7.9	8.5	8.4	8.5	8.2	8.4	8.0
28	---	---	8.2	8.1	8.3	8.1	8.4	8.4	8.5	8.2	8.5	8.3
29	---	---	8.2	8.0	8.3	7.6	8.5	8.4	8.5	7.7	8.6	7.8
30	---	---	8.2	8.0	8.2	7.9	8.5	8.3	---	---	8.5	8.2
31	---	---	---	---	8.0	7.9	8.5	8.2	---	---	8.6	8.3
MONTH	---	---	8.5	8.0	8.3	7.6	8.5	7.8	8.7	7.4	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.7	8.5	8.1	7.6	8.0	7.8	7.8	6.6	8.4	8.2	8.7	8.3
2	8.7	8.6	8.0	7.8	8.0	7.7	7.7	7.5	8.9	8.3	8.7	8.4
3	9.0	8.5	8.0	7.8	8.0	7.6	7.7	7.4	8.7	8.3	8.5	7.9
4	8.6	8.3	7.9	7.8	8.0	7.3	7.7	7.6	8.7	8.2	7.9	7.7
5	8.5	8.3	8.4	7.8	8.2	7.7	8.0	7.6	8.4	7.8	7.8	7.4
6	8.5	8.4	8.5	8.3	8.1	7.8	---	---	8.2	8.1	7.8	7.6
7	8.6	7.8	8.6	8.3	8.3	7.9	---	8.2	8.6	8.1	7.8	7.3
8	8.1	7.8	8.6	7.9	8.3	8.0	8.8	8.1	8.6	8.4	7.9	7.7
9	8.2	7.9	8.2	8.0	8.3	8.1	8.8	8.7	8.6	8.3	7.9	7.7
10	8.7	8.2	8.4	8.1	8.4	8.2	8.8	7.8	8.6	8.1	7.9	7.5
11	8.5	7.9	8.3	7.9	8.4	8.3	8.5	7.9	8.4	8.1	8.0	7.6
12	8.7	8.1	8.4	8.0	8.7	8.3	8.4	7.3	8.3	7.8	7.9	7.5
13	8.5	7.3	8.3	8.1	8.7	8.2	8.3	7.8	8.3	7.7	8.4	7.5
14	8.3	7.6	8.2	7.9	8.2	7.2	8.4	7.7	9.0	8.1	8.2	7.9
15	7.8	7.7	8.4	8.2	8.1	7.8	8.2	8.1	9.1	8.9	8.2	7.9
16	8.0	7.6	8.3	8.1	7.9	7.5	8.1	7.9	9.1	8.7	8.2	7.9
17	8.3	7.7	8.3	8.1	8.0	7.8	8.6	7.9	9.1	8.7	8.1	7.7
18	8.2	7.8	8.4	7.8	8.0	7.5	8.6	7.9	9.1	8.7	8.0	7.5
19	8.3	8.1	8.2	7.8	8.1	7.6	8.7	8.2	9.1	8.7	8.0	7.7
20	8.1	7.9	8.0	7.8	8.0	7.8	8.7	7.5	9.1	8.8	8.2	7.6
21	8.0	7.9	7.9	7.4	8.2	7.8	8.6	7.7	9.1	8.6	8.3	7.9
22	7.8	7.7	7.9	7.5	8.2	8.1	8.6	7.9	9.1	8.9	8.4	8.1
23	7.8	7.7	7.7	7.3	8.4	8.1	8.6	7.9	9.1	8.6	8.4	8.2
24	7.8	7.7	7.8	7.4	8.3	8.2	8.9	8.3	9.1	8.6	8.4	8.2
25	7.8	7.7	7.7	7.1	8.2	7.9	8.7	8.5	8.8	8.2	8.4	8.2
26	7.9	7.8	7.8	7.3	8.2	7.8	9.2	8.6	8.5	7.8	8.3	8.1
27	7.8	7.5	7.8	7.6	8.1	7.4	9.0	8.4	8.1	8.0	8.2	8.1
28	7.8	7.7	7.7	7.4	8.1	8.0	8.8	8.5	8.2	7.9	8.2	8.1
29	7.8	7.6	7.7	7.4	---	---	8.6	8.4	8.2	7.7	8.2	8.1
30	7.7	7.5	8.3	7.4	7.9	7.5	8.4	8.1	8.6	8.1	8.4	8.2
31	---	---	8.2	8.0	---	---	8.5	8.0	8.6	8.1	---	---
MONTH	9.0	7.3	8.6	7.1	8.7	7.2	9.2	6.6	9.1	7.7	8.7	7.3
YEAR	9.2	6.6										

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	12.4	11.8	11.5	10.7	15.0	14.4	13.6	11.3
2	---	---	7.7	6.8	13.1	12.2	11.7	11.5	14.9	14.2	11.7	9.8
3	---	---	7.7	7.1	13.3	12.7	13.7	11.7	15.0	14.2	11.5	10.3
4	---	---	---	---	13.4	12.9	13.7	13.6	15.0	15.0	11.6	11.2
5	---	---	---	---	13.2	12.4	14.3	13.7	15.0	14.6	12.4	11.2
6	---	---	---	---	12.4	11.0	14.8	14.3	15.0	14.9	13.7	11.8
7	---	---	---	---	11.0	9.4	15.0	14.7	15.0	15.0	13.0	12.1
8	---	---	11.6	10.7	10.7	10.3	15.0	15.0	15.0	15.0	14.0	11.8
9	---	---	10.7	10.1	10.6	10.5	15.0	14.0	15.0	14.4	13.9	12.1
10	---	---	11.1	9.8	10.6	10.2	14.7	13.8	14.9	13.6	14.7	12.3
11	---	---	10.6	9.8	10.5	10.2	14.3	12.6	14.2	13.2	14.4	12.4
12	---	---	11.0	9.6	10.9	10.5	12.8	10.5	13.7	12.8	13.5	11.5
13	---	---	10.4	9.4	11.6	10.9	10.7	10.1	13.2	12.5	13.6	11.1
14	---	---	10.2	8.9	11.7	11.5	10.8	10.4	12.6	12.0	12.8	11.3
15	---	---	---	---	11.5	10.4	11.0	10.7	12.5	11.9	12.6	11.1
16	---	---	---	---	10.8	10.5	11.7	11.0	12.2	11.8	11.8	11.0
17	---	---	---	---	11.3	10.6	12.1	11.7	12.0	11.7	11.1	10.6
18	---	---	---	---	12.4	11.3	12.2	11.8	12.1	11.6	11.2	10.3
19	---	---	---	---	12.8	12.4	12.2	11.9	12.4	11.7	11.3	10.3
20	---	---	---	---	12.7	12.4	12.3	11.9	13.5	12.0	12.1	10.6
21	---	---	---	---	12.4	12.3	12.1	11.6	13.7	12.9	12.1	10.2
22	---	---	---	---	12.8	12.4	11.8	11.5	14.7	12.7	10.3	8.5
23	---	---	12.6	11.3	12.9	12.7	11.7	11.3	14.0	12.8	11.6	10.1
24	---	---	12.5	11.3	12.8	10.8	11.8	11.4	13.6	13.1	12.5	11.0
25	---	---	13.0	11.5	10.9	10.6	12.2	11.6	13.7	13.0	11.7	10.8
26	---	---	13.3	11.8	10.7	10.0	12.8	12.1	13.3	12.8	14.4	10.9
27	---	---	12.4	11.9	10.3	9.8	13.2	12.7	13.7	12.4	11.8	10.5
28	---	---	12.8	11.9	10.3	9.8	13.4	12.7	14.9	12.4	11.7	10.2
29	---	---	12.2	10.8	11.0	10.2	13.6	13.2	14.3	12.1	12.0	5.7
30	---	---	11.9	11.3	10.9	10.0	13.7	13.1	---	---	9.3	5.4
31	---	---	---	---	10.7	10.3	14.7	13.3	---	---	13.6	9.8
MONTH	---	---	---	---	13.4	9.4	15.0	10.1	15.0	11.6	14.7	5.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.6	9.0	8.3	7.5	7.2	7.8	7.6	11.8	7.4	14.2	7.9
2	15.0	10.9	8.8	8.4	8.1	7.1	7.8	7.6	11.9	8.2	11.9	7.0
3	15.0	12.6	9.0	8.2	8.2	7.8	8.2	7.6	8.7	6.8	8.2	5.7
4	14.8	12.9	8.9	8.3	8.2	7.3	8.1	7.7	8.0	6.3	6.9	5.3
5	14.9	12.8	10.5	8.1	8.2	7.1	8.6	8.0	7.7	6.2	7.0	6.0
6	13.9	11.9	9.8	8.6	7.8	7.0	---	---	8.1	6.4	7.4	6.1
7	12.1	9.7	9.8	8.2	8.4	7.1	8.3	8.2	8.1	6.4	7.5	6.5
8	13.9	11.5	9.1	6.4	8.1	7.3	10.0	6.8	8.5	6.3	7.4	6.2
9	12.9	11.4	8.4	6.9	8.0	7.1	9.3	8.4	9.6	7.1	8.9	6.0
10	11.5	10.8	9.0	8.0	9.3	7.2	10.5	7.8	10.8	7.8	8.2	6.6
11	10.9	10.2	8.7	8.4	9.4	7.8	8.4	6.3	11.6	7.8	8.1	6.4
12	10.5	9.8	8.6	8.0	9.4	7.9	7.4	4.4	11.8	8.1	7.3	6.4
13	9.8	7.8	8.4	7.8	8.3	7.3	7.7	3.5	13.6	8.1	7.8	5.7
14	8.5	7.9	8.7	8.3	7.9	6.5	7.6	5.8	11.6	5.1	7.2	6.2
15	8.9	8.5	8.6	7.9	6.9	6.4	8.2	6.7	14.4	7.4	7.8	6.0
16	9.1	8.4	8.7	8.5	7.2	6.8	8.0	7.2	15.0	7.5	7.3	6.0
17	9.0	8.3	8.9	6.8	7.3	7.2	8.7	7.7	15.0	9.0	6.2	5.9
18	8.5	8.2	8.3	7.9	7.4	7.1	8.8	8.2	15.0	8.7	6.4	5.8
19	8.5	8.2	8.1	7.6	7.7	7.0	9.2	8.3	12.7	8.4	6.2	5.1
20	8.7	8.4	7.7	7.3	7.8	7.1	9.5	8.8	14.4	6.2	6.0	4.9
21	9.3	8.7	7.6	7.1	8.1	7.1	10.4	9.3	14.5	7.2	6.2	4.6
22	9.5	8.9	7.3	6.8	8.6	7.7	11.1	10.0	13.9	7.3	6.4	4.8
23	9.2	8.9	7.2	6.5	9.3	8.0	11.9	10.6	12.5	7.0	6.5	5.2
24	9.1	8.8	7.3	6.4	9.2	8.6	12.1	11.3	11.4	6.5	5.8	5.2
25	9.1	8.7	7.3	6.4	9.2	8.6	14.3	11.7	11.6	6.5	6.6	5.8
26	9.8	8.8	7.5	6.4	9.2	8.6	14.2	9.4	10.2	6.7	6.2	5.8
27	9.2	8.9	7.9	6.6	8.8	8.4	8.0	6.0	8.7	6.2	6.4	6.0
28	9.1	7.5	7.8	6.8	8.4	7.9	7.1	5.3	11.1	6.7	6.6	6.4
29	8.9	8.7	7.7	6.9	---	---	8.2	5.6	13.4	7.3	7.3	6.8
30	8.9	8.5	7.6	6.8	7.9	7.6	9.0	6.4	14.8	7.6	7.7	7.2
31	---	---	7.2	6.6	---	---	10.4	6.8	14.9	8.0	---	---
MONTH	15.0	7.5	10.5	6.4	9.4	6.4	14.3	3.5	15.0	5.1	14.2	4.6
YEAR	15.0	3.5										

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	23.0	---	---	5.0	3.5	7.0	5.5	0.5	0.0	9.5	7.5
2	25.0	22.5	18.5	17.0	3.5	2.5	5.5	4.5	1.0	0.0	10.0	7.0
3	25.0	23.0	17.0	15.5	2.5	2.0	4.5	4.0	1.0	0.0	7.0	4.5
4	25.0	23.0	---	---	3.5	2.0	4.5	4.0	0.0	0.0	4.5	3.5
5	23.5	21.5	---	---	4.5	3.0	4.0	2.5	0.5	0.0	3.5	2.0
6	22.0	20.0	---	---	6.5	4.5	2.5	1.0	0.0	0.0	3.0	1.5
7	20.0	18.0	---	---	8.5	6.5	1.5	0.5	0.5	0.0	4.5	2.5
8	18.0	16.0	7.0	6.0	9.0	8.5	1.5	0.5	0.5	0.0	4.5	3.5
9	17.5	15.5	6.0	5.5	9.0	8.5	3.0	1.0	0.5	0.0	4.0	2.5
10	15.5	14.5	6.5	5.0	10.5	9.0	5.0	3.0	0.5	0.0	4.5	2.5
11	15.5	13.5	7.0	5.0	10.5	9.0	5.5	4.5	1.0	0.0	6.5	3.0
12	16.0	13.5	7.5	6.0	9.0	8.0	5.0	4.0	1.0	0.0	9.0	6.0
13	16.0	13.0	9.0	7.0	8.0	6.5	5.0	4.0	0.5	0.0	10.0	8.5
14	16.5	14.5	10.5	8.0	6.5	6.0	4.0	2.0	1.0	0.0	9.5	7.5
15	17.0	14.5	12.0	10.0	9.0	6.5	2.0	0.0	1.0	0.0	7.5	7.0
16	16.5	16.0	12.5	11.0	10.0	9.0	0.0	0.0	1.5	0.0	8.0	7.0
17	17.0	16.0	13.0	11.5	9.5	6.5	0.0	0.0	2.5	1.0	8.0	6.5
18	18.0	16.5	13.5	11.5	6.5	3.5	0.0	0.0	3.0	2.5	7.5	6.0
19	18.5	16.5	13.0	11.0	3.5	3.0	1.0	0.0	2.5	1.5	8.0	6.0
20	19.0	16.5	11.0	9.0	3.5	3.0	1.5	0.5	2.0	0.5	10.0	7.0
21	---	---	9.0	6.5	4.5	3.5	2.5	1.5	2.5	1.0	11.0	9.0
22	---	---	6.5	5.0	4.5	3.5	5.0	2.5	3.5	2.0	11.0	7.5
23	---	---	5.0	4.0	4.0	3.5	5.5	4.5	2.5	2.0	7.5	4.5
24	---	---	4.0	4.0	5.5	4.0	7.0	5.0	2.0	1.5	5.0	3.5
25	---	---	4.5	3.5	5.5	4.5	6.5	4.5	2.0	1.0	5.0	3.5
26	---	---	4.0	3.5	7.5	5.5	4.5	2.5	2.5	2.0	6.0	3.5
27	---	---	4.5	4.0	10.0	7.5	2.5	0.5	4.0	2.0	7.0	6.0
28	---	---	4.5	4.0	10.0	7.5	0.5	0.0	5.5	3.5	9.0	6.5
29	---	---	5.5	4.5	7.5	6.0	0.5	0.0	8.0	5.0	9.0	8.0
30	---	---	5.5	5.0	10.0	6.5	0.5	0.0	---	---	9.5	7.0
31	---	---	---	---	8.5	7.0	0.5	0.0	---	---	10.0	7.5
MONTH	---	---	18.5	3.5	10.5	2.0	7.0	0.0	8.0	0.0	11.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	18.5	16.5	18.0	15.0	23.0	20.0	27.5	24.5	27.0	23.5
2	8.0	7.0	19.5	17.0	19.5	15.5	23.5	21.0	26.5	25.0	25.5	23.5
3	8.5	6.0	20.0	17.5	21.5	17.5	24.5	22.5	26.5	25.0	24.5	21.5
4	10.0	8.0	19.5	18.0	24.0	20.0	24.0	21.5	25.5	23.5	22.5	20.5
5	11.0	8.0	19.0	17.0	25.0	22.0	23.0	20.5	25.0	21.5	23.5	20.5
6	13.5	9.5	19.5	16.5	24.5	23.0	---	---	23.5	22.5	23.5	20.0
7	13.0	4.5	20.0	17.5	25.0	22.0	22.0	21.0	24.5	22.5	24.0	20.0
8	4.5	2.5	20.0	16.0	23.5	22.0	23.0	20.5	23.5	21.5	23.5	21.0
9	6.0	3.5	16.0	13.5	22.5	21.5	22.5	21.5	23.5	21.0	24.0	21.0
10	8.5	5.5	13.5	12.0	23.0	20.5	25.0	22.5	23.5	20.5	24.0	20.0
11	11.0	8.5	15.0	12.5	24.0	21.5	25.5	23.5	24.5	21.0	23.5	20.5
12	14.0	11.0	17.0	14.0	21.5	20.0	27.0	23.5	25.5	21.5	24.0	22.0
13	17.5	14.0	16.5	15.0	21.5	20.5	28.0	25.5	27.5	23.0	25.0	22.0
14	17.5	16.0	16.5	14.5	22.0	19.0	29.0	26.0	28.0	23.5	24.5	22.0
15	16.0	15.5	17.0	15.5	22.5	21.0	27.5	26.5	27.5	25.5	24.0	22.0
16	15.5	14.5	17.0	16.0	22.0	20.5	26.5	25.5	28.0	23.5	22.5	21.0
17	15.5	14.0	17.5	15.5	23.0	21.0	27.0	25.0	29.5	25.0	23.5	21.0
18	16.5	14.0	19.5	16.5	23.5	21.0	29.0	25.5	30.5	26.5	24.0	21.0
19	16.0	15.5	20.5	17.5	26.0	22.0	29.5	27.5	30.0	27.0	25.0	22.0
20	16.0	15.0	21.0	19.0	25.0	23.5	31.0	27.5	29.0	26.0	24.5	21.0
21	15.0	12.5	22.5	19.5	24.5	22.5	31.5	29.0	29.5	25.5	24.0	20.5
22	13.0	12.0	23.5	20.5	22.5	19.5	31.5	29.5	26.5	25.5	23.5	20.5
23	14.0	13.0	24.5	21.0	19.5	17.0	32.5	29.5	29.0	26.0	21.5	20.0
24	14.5	13.5	24.5	21.0	17.0	15.5	31.5	29.0	28.0	26.0	21.0	20.5
25	14.5	12.5	25.5	21.5	17.0	15.0	30.0	28.0	28.0	25.5	21.5	20.5
26	14.5	12.0	25.5	22.5	19.5	15.5	28.5	27.0	27.5	26.0	21.5	20.5
27	15.5	12.5	25.0	22.0	21.5	18.5	28.5	26.5	26.0	25.0	21.0	21.0
28	15.5	13.5	24.0	21.0	21.5	20.5	27.5	26.0	26.5	23.5	21.0	20.0
29	16.0	14.5	23.5	21.0	---	---	26.0	25.0	27.5	23.0	20.0	19.5
30	17.0	15.0	21.5	19.5	21.0	20.0	26.5	23.5	27.5	23.5	19.5	16.5
31	---	---	19.5	15.5	---	---	28.0	24.5	27.5	23.5	---	---
MONTH	17.5	2.5	25.5	12.0	26.0	15.0	32.5	20.0	30.5	20.5	27.0	16.5
YEAR	32.5	0.0										

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO

LOCATION.--Lat 39°03'32", long 84°03'05", Clermont County, at downstream end of center pier of bridge on McKeevers Road near Williamsburg, 0.5 mile upstream from sewage disposal plant, 1.0 mile upstream from gaging station, and 2.1 miles upstream from Todd Run.

DRAINAGE AREA.--234 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-70 (partial-record station); November 1970 to September 1972.
Water temperatures: December 1970 to September 1972.
Prior to October 1970, published as station 03246500 East Fork Little Miami River at Williamsburg, Ohio.

EXTREMES.--1971-72:
Specific conductance: Maximum, 601 micromhos Nov. 2; minimum, 119 micromhos June 16.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT. 13...	1100	27	8.1	150	100	25	20	84	20
DEC. 01...	1145	236	7.9	650	420	80	38	57	18
JAN. 14...	1200	190	6.4	730	420	22	18	60	16
FEB. 17...	1600	742	6.2	790	220	9	9	29	8.4
APR. 05...	1130	540	4.9	2400	100	240	10	37	7.0
MAY 11...	1600	212	7.3	1000	640	50	48	40	17
JUNE 30...	1402	38	5.3	60	40	28	27	74	25
AUG. 11...	1120	6.7	5.1	320	150	83	45	41	13
SEP. 21...	1120	4.4	1.7	180	60	94	59	50	21

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT. 13...	340	340	290	54	566	7.6	15.0	15
DEC. 01...	305	272	220	72	458	7.4	4.5	48
JAN. 14...	278	260	220	64	433	7.9	2.5	70
FEB. 17...	162	148	110	34	247	7.5	2.0	40
APR. 05...	170	156	120	44	258	7.4	11.0	100
MAY 11...	208	204	150	52	353	7.4	17.0	40
JUNE 30...	346	323	290	62	544	8.2	--	10
AUG. 11...	216	195	160	36	339	7.5	--	10
SEP. 21...	254	249	210	49	432	7.6	20.0	10

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO--Continued

EXTREMES.--1971-72--Continued
Water temperatures: Maximum, 31.5°C July 22, 24; minimum, freezing point on several days during January and February.

Period of record:
Specific conductance (1971-72): Maximum, 601 micromhos Nov. 2, 1971; minimum, 119 micromhos June 16, 1972.
Water temperatures (1971-72): Maximum, 31.5°C July 22, 24, 1972; minimum, freezing point on several days during January and February 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Maximum recorded specific conductance value of 901 micromhos occurred May 14, 1971. Interruptions in the record were due to malfunctions of the instrument.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT. 13...	10	4.2	288	0	45	20	.2	1.5	6.6
DEC. 01...	9.4	6.5	176	0	50	28	.2	1.8	8.1
JAN. 14...	7.3	2.8	184	0	49	19	.2	2.2	9.7
FEB. 17...	5.1	3.2	85	0	31	12	.2	1.9	8.4
APR. 05...	5.0	3.5	94	0	33	12	.4	1.6	7.0
MAY 11...	6.0	3.8	144	0	35	14	.3	2.0	8.8
JUNE 30...	7.9	2.0	276	0	45	18	.2	2.1	9.5
AUG. 11...	7.4	4.4	145	0	33	14	.3	1.2	5.3
SEP. 21...	11	5.0	200	0	39	20	.3	.70	3.0

LITTLE MIAMI RIVER BASIN

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	440	403	599	583	495	452	---	---	539	521	435	405
2	472	440	601	583	452	441	---	---	---	---	405	271
3	498	468	596	549	442	439	---	---	---	---	283	261
4	508	492	---	---	448	441	---	---	---	---	347	283
5	510	502	---	---	452	447	---	---	---	---	385	347
6	519	484	---	---	449	252	---	---	---	---	424	384
7	533	473	---	---	288	242	---	---	592	566	425	421
8	538	247	---	---	336	183	---	---	594	582	448	424
9	542	536	---	---	406	332	---	---	587	572	466	448
10	550	541	---	---	461	404	---	---	572	566	471	461
11	556	546	---	---	483	456	---	---	572	563	469	463
12	565	554	---	---	492	477	368	351	570	559	476	467
13	572	564	---	---	492	487	401	368	569	522	491	476
14	576	566	---	---	489	476	415	392	527	361	495	467
15	579	568	---	---	457	325	513	415	361	241	497	478
16	576	559	---	---	359	312	526	490	241	206	478	319
17	585	560	---	---	378	355	490	474	283	215	403	304
18	591	573	---	---	401	374	480	474	313	283	329	311
19	573	536	---	---	434	397	504	480	327	312	368	329
20	536	453	---	---	446	425	534	504	359	326	418	368
21	453	433	---	---	466	416	559	534	390	359	447	316
22	459	433	---	---	510	442	559	546	404	388	316	226
23	474	457	568	561	478	460	546	475	426	391	290	231
24	474	467	562	557	463	460	480	398	391	303	357	290
25	467	451	575	562	466	463	396	343	333	286	411	357
26	481	450	580	571	---	---	360	341	332	272	452	411
27	552	481	575	572	---	---	390	357	330	317	478	452
28	576	507	573	564	---	---	428	390	373	328	496	478
29	582	508	564	454	---	---	450	428	422	373	505	496
30	582	573	511	445	---	---	489	450	---	---	517	504
31	591	573	---	---	---	---	521	489	---	---	525	517
MONTH	591	247	---	---	510	183	---	---	594	206	525	226

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	525	521	495	489	282	234	533	310	491	472	364	339
2	524	520	492	488	330	282	392	328	491	476	365	339
3	525	517	490	483	370	330	426	391	490	480	364	321
4	517	283	483	481	402	370	438	386	482	400	376	349
5	300	264	481	475	429	402	386	372	431	263	380	312
6	331	285	475	471	445	429	382	366	283	269	367	273
7	355	212	475	471	464	445	420	382	304	283	326	246
8	225	200	473	362	477	464	444	420	318	304	---	---
9	311	224	364	302	502	477	457	444	328	318	---	---
10	360	311	325	299	507	491	457	451	330	322	---	---
11	412	359	354	324	507	498	455	444	328	320	---	---
12	447	412	376	346	507	501	444	418	326	315	---	---
13	445	233	383	348	513	507	432	423	329	314	---	---
14	260	209	348	279	527	190	433	424	328	310	---	---
15	319	260	294	264	224	199	436	423	327	311	---	---
16	332	208	297	274	200	119	435	431	335	302	387	369
17	273	196	312	289	270	145	446	433	327	300	404	387
18	329	273	378	312	354	270	457	443	318	291	411	398
19	378	329	424	378	412	354	462	452	318	294	428	392
20	379	345	457	424	450	412	469	457	318	288	433	390
21	345	327	479	457	475	450	477	462	---	---	427	413
22	327	304	487	479	495	475	484	471	---	---	436	328
23	326	301	492	484	509	495	494	480	---	---	425	336
24	359	326	503	492	516	509	495	471	327	302	425	308
25	394	358	509	502	530	516	486	477	329	306	401	203
26	424	394	511	502	544	530	483	472	322	299	263	214
27	452	424	514	505	548	539	472	456	328	315	308	144
28	473	452	518	506	548	544	469	457	335	310	409	168
29	485	472	517	505	550	542	476	465	338	322	443	347
30	491	482	507	255	550	536	480	471	343	332	342	235
31	---	---	351	217	---	---	486	468	349	336	---	---
MONTH	525	196	518	217	550	119	533	310	491	263	---	---
YEAR	601	119										

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.5	23.0	18.5	17.0	4.0	2.5	---	---	0.5	0.0	10.5	8.0
2	24.5	22.5	19.5	18.0	2.5	1.5	---	---	---	---	11.0	8.0
3	23.5	22.5	---	---	1.5	0.5	---	---	---	---	8.0	4.5
4	24.0	22.5	---	---	2.5	1.0	---	---	---	---	4.5	3.5
5	23.0	21.0	---	---	3.5	2.5	---	---	---	---	4.0	2.5
6	22.0	19.5	---	---	6.5	3.5	---	---	---	---	4.0	1.5
7	20.5	17.0	---	---	9.0	6.5	---	---	0.5	0.5	5.5	3.0
8	18.0	16.5	---	---	9.5	9.0	---	---	0.5	0.5	5.5	4.0
9	16.5	15.0	---	---	9.5	9.0	---	---	0.5	0.5	4.0	2.5
10	15.0	13.5	---	---	11.5	9.5	---	---	0.5	0.5	5.0	2.0
11	15.5	12.5	---	---	11.0	9.0	---	---	1.0	0.5	7.5	3.5
12	15.5	12.0	---	---	9.0	7.5	5.5	5.0	1.0	0.5	10.0	7.5
13	15.0	12.5	---	---	8.0	6.5	6.5	5.0	0.5	0.5	11.0	10.0
14	17.0	14.0	---	---	8.0	6.0	5.5	3.0	1.0	0.5	10.5	8.0
15	16.5	14.5	---	---	10.5	7.5	3.5	0.0	0.5	0.5	8.0	7.0
16	17.0	16.0	---	---	11.0	10.0	1.0	0.5	1.0	0.5	9.0	7.5
17	17.0	16.0	---	---	10.5	7.0	1.0	0.5	1.5	0.5	9.5	8.0
18	18.0	16.5	---	---	7.0	4.0	1.5	1.0	3.0	1.5	9.0	7.0
19	18.5	17.0	---	---	4.0	2.5	2.0	1.0	2.5	1.0	9.5	7.0
20	18.5	17.0	---	---	4.5	3.5	2.5	2.0	1.5	0.5	11.5	7.5
21	18.5	17.5	---	---	5.0	4.5	5.0	2.5	2.5	0.5	12.0	10.0
22	19.0	18.0	---	---	4.5	3.0	5.5	5.0	3.5	2.0	12.0	8.5
23	19.0	18.0	3.5	3.0	4.5	3.0	6.0	5.5	2.0	1.0	8.5	5.5
24	18.5	18.0	3.0	2.5	6.0	4.5	8.0	6.0	1.5	1.0	7.0	4.5
25	18.5	17.5	4.0	2.5	5.5	5.0	6.5	4.5	2.0	1.0	6.0	4.5
26	18.0	17.0	3.0	2.5	---	---	4.5	2.0	2.5	2.0	7.5	3.5
27	17.5	16.5	3.5	3.0	---	---	2.0	0.0	4.5	2.0	8.0	7.0
28	18.0	17.0	4.0	3.5	---	---	0.5	0.0	6.0	3.0	10.0	7.5
29	18.0	16.5	5.0	4.0	---	---	0.5	0.0	8.5	5.5	9.5	8.5
30	18.0	16.0	5.0	4.0	---	---	0.5	0.0	---	---	10.5	7.5
31	18.0	17.0	---	---	---	---	0.5	0.0	---	---	10.5	8.0
MONTH	24.5	12.0	---	---	11.5	0.5	---	---	8.5	0.0	12.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.5	19.5	18.0	18.5	15.5	22.5	20.0	27.0	23.5	25.0	20.5
2	8.5	8.0	20.5	18.5	20.0	16.5	23.0	22.0	27.0	24.0	25.0	20.5
3	9.5	7.0	21.0	19.0	22.5	19.0	24.0	22.5	27.5	24.0	21.5	19.5
4	10.0	9.0	20.5	19.0	24.0	21.5	23.5	21.5	24.5	23.0	21.5	17.5
5	11.5	8.5	20.0	17.5	25.5	23.0	22.0	20.5	23.0	20.5	21.5	15.0
6	14.0	10.0	22.0	18.5	24.5	23.0	21.5	19.5	21.5	20.5	20.5	12.5
7	13.5	6.5	22.5	20.5	25.5	22.5	22.0	19.5	22.5	21.0	22.5	12.5
8	6.5	4.0	21.5	18.0	24.5	22.5	23.0	20.0	22.5	20.5	---	---
9	7.0	3.5	18.0	15.5	23.5	22.5	24.0	21.5	23.0	20.5	---	---
10	9.0	7.0	17.0	14.0	24.5	21.0	25.0	22.5	23.0	18.5	---	---
11	12.0	9.0	18.0	14.0	23.0	19.5	26.5	23.5	22.5	18.0	---	---
12	15.5	11.5	19.5	15.5	22.5	19.0	26.5	23.5	23.0	20.0	---	---
13	18.0	15.5	19.0	16.5	22.5	21.0	27.5	24.0	25.5	20.5	---	---
14	19.5	18.0	18.0	16.0	22.5	20.5	28.5	25.0	26.0	20.5	---	---
15	18.5	17.5	18.0	17.0	23.0	22.0	27.0	25.5	25.5	22.0	---	---
16	17.5	16.0	17.5	17.0	23.0	21.5	25.5	24.5	26.5	20.5	21.5	19.5
17	18.5	16.0	18.5	16.0	23.0	22.0	26.5	24.0	27.5	22.0	22.0	20.0
18	19.5	15.5	20.5	16.5	24.0	21.0	28.0	24.5	28.5	23.5	23.0	20.0
19	18.0	17.0	21.5	18.0	25.5	22.5	29.5	26.0	28.0	22.0	24.0	19.5
20	17.5	16.5	22.0	20.0	25.0	24.0	30.5	27.0	26.0	21.0	23.5	17.0
21	16.5	13.5	23.0	20.0	24.0	23.0	31.0	27.5	---	---	23.0	17.5
22	14.5	13.0	24.5	22.0	23.0	19.5	31.5	28.0	---	---	22.5	18.0
23	16.0	14.0	25.0	22.5	19.5	17.0	31.0	28.0	---	---	21.0	17.0
24	16.0	14.5	25.5	22.5	17.0	16.5	31.5	28.0	25.0	19.5	20.0	18.5
25	16.5	13.5	26.5	23.0	17.5	16.0	29.5	26.5	25.5	21.5	20.5	19.0
26	16.5	13.0	26.5	24.0	20.5	17.0	28.5	25.0	26.0	22.0	21.0	20.0
27	17.5	14.0	26.0	23.0	23.0	19.5	28.5	25.5	24.0	21.5	20.5	20.0
28	17.5	15.0	25.0	22.0	22.5	21.5	26.0	24.5	25.5	20.5	20.5	19.5
29	18.0	16.0	25.5	22.5	23.0	21.0	25.5	23.5	25.0	20.5	20.0	19.5
30	19.0	16.5	23.0	19.5	22.5	21.5	26.5	22.5	25.0	20.5	19.5	16.5
31	---	---	19.5	16.5	---	---	27.5	23.0	25.0	20.5	---	---
MONTH	19.5	3.5	26.5	14.0	25.5	15.5	31.5	19.5	28.5	18.0	---	---
YEAR	31.5	0.0										

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, at gaging station on right bank 50 ft upstream from North Street Bridge in Sidney, and 0.5 mile downstream from Tawawa Creek. Sampling site at North Street Bridge.

DRAINAGE AREA.--541 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.
Water temperatures: October 1967 to September 1971.
Sediment records: October 1967 to September 1972.

EXTREMES.--1971-72:
Sediment concentrations: **Maximum** daily, 975 mg/l **May** 15; minimum daily, 8 mg/l Nov. 24, Feb. 26, 27, Apr. 5.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT.								
06...	0925	37	322	0	73	28	--	.020
13...	0935	48	344	0	78	28	.9	.000
20...	0920	57	346	0	78	34	--	.010
27...	0915	57	366	0	80	32	--	.020
NOV.								
10...	0910	69	300	0	67	24	--	.010
DEC.								
15...	0910	2480	162	0	64	18	--	.14
JAN.								
19...	0915	310	270	0	97	22	--	.020
FEB.								
16...	0915	800	188	0	65	32	--	.070
MAR.								
15...	0900	1390	178	0	64	18	--	.070
APR.								
19...	0915	1860	192	0	48	18	--	.090
MAY								
17...	0755	2550	190	0	52	10	--	.090
JUNE								
21...	0845	348	284	0	84	22	--	.050
JULY								
05...	0905	1320	186	0	44	20	--	.15
12...	0805	292	282	0	69	17	--	.090
19...	0800	269	298	0	85	21	--	.050
26...	0810	128	316	4	76	26	--	.020
AUG.								
02...	0805	82	312	4	74	26	--	.020
09...	0820	98	328	0	73	26	--	.030
16...	0910	74	334	4	73	28	.9	.020
23...	0620	72	332	0	69	26	--	.020
30...	0820	58	358	0	76	26	--	.010
SEP.								
06...	0805	56	362	0	77	42	--	.020
13...	0810	204	292	0	48	28	--	.030
20...	0850	96	308	0	56	24	--	.020
27...	0805	1390	194	0	60	18	--	.070

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

EXTREMES.--1971-72--Continued
Sediment discharges: Maximum daily, 10,200 tons Apr. 14; minimum daily, 1.6 tons Nov. 9.

Period of record:
Sediment concentrations: Maximum daily, 1,310 mg/l June 26, 1971; minimum daily, 0 mg/l Mar. 23-25, 1970.
Sediment discharges: Maximum daily, 10,200 tons Apr. 14, 1972; minimum daily, 0 tons Mar. 23-25, 1970.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September and monthly November to June. Special samples were also collected twice during the year to further define the quality of water. Flow affected by ice Feb. 2-10, 17-23. Some regulation by Indian Lake (capacity, 45,900 acre-ft) 28 miles upstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.									
06...	.08	.2	1.1	.02	.03	.11	.34	400	360
13...	.01	.2	.9	.14	.18	.17	.52	440	350
20...	.03	.7	3.1	.02	.03	.24	.72	450	360
27...	.05	.4	1.7	.04	.06	.13	.41	466	390
NOV.									
10...	.04	.2	.9	.11	.14	.18	.57	374	310
DEC.									
15...	.47	4.5	20	.11	.14	.71	2.2	290	220
JAN.									
19...	.05	3.4	15	.02	.03	.12	.36	407	350
FEB.									
16...	.23	3.2	14	.52	.67	.50	1.5	342	230
MAR.									
15...	.24	6.9	30	.48	.62	.22	.69	342	250
APR.									
19...	.30	4.5	20	.66	.85	.25	.76	286	210
MAY									
17...	.31	4.3	19	.53	.69	.22	.67	276	230
JUNE									
21...	.16	2.2	9.7	.34	.43	.19	.58	390	340
JULY									
05...	.49	8.4	37	.34	.43	.31	.96	334	240
12...	.30	3.2	14	.36	.46	.21	.64	356	330
19...	.17	3.2	14	.34	.43	.20	.62	410	330
26...	.06	1.3	6.0	.30	.39	.20	.62	416	350
AUG.									
02...	.08	.4	2.0	1.2	1.6	.16	.48	448	350
09...	.09	.7	3.2	.33	.42	.20	.62	421	360
16...	.08	.4	1.9	.67	.87	.18	.55	439	360
23...	.06	.8	3.3	.31	.40	.17	.52	432	360
30...	.02	.9	4.0	.30	.39	.24	.73	450	380
SEP.									
06...	.08	1.2	5.4	.06	.08	.20	.60	471	390
13...	.11	.9	3.9	.48	.62	.21	.64	384	310
20...	.08	1.5	6.7	.48	.62	.19	.58	393	340
27...	.24	1.5	6.8	.41	.53	.30	.93	288	240

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.								
06...	96	679	8.0	17.5	50	0	9.1	95
13...	68	722	8.0	12.5	65	2	10.4	97
20...	76	727	8.0	15.5	15	2	9.6	96
27...	90	765	7.8	15.0	15	0	8.5	83
NOV.								
10...	64	630	7.9	3.0	1700	0	12.4	92
DEC.								
15...	87	444	7.5	6.5	170	4	10.3	84
JAN.								
19...	130	639	7.7	.0	10	2	12.4	85
FEB.								
16...	76	517	7.7	.0	30	2	11.8	81
MAR.								
15...	100	509	7.7	3.5	75	2	11.9	89
APR.								
19...	52	463	7.8	14.5	85	4	9.0	87
MAY								
17...	74	440	7.9	13.5	150	2	8.8	84
JUNE								
21...	110	609	8.0	21.0	35	4	8.2	91
JULY								
05...	88	470	7.8	18.0	150	4	7.1	75
12...	98	601	8.0	22.5	65	2	7.6	86
19...	86	609	8.2	23.5	65	2	7.8	91
26...	84	656	8.3	23.0	35	4	8.2	94
AUG.								
02...	88	654	8.3	22.5	20	2	9.2	100
09...	90	671	8.1	18.0	30	4	8.8	93
16...	80	686	8.3	21.5	30	2	8.9	100
23...	88	682	7.9	23.5	35	2	7.1	82
30...	86	714	8.1	21.5	30	2	7.7	86
SEP.								
06...	93	730	7.9	17.5	25	2	8.7	91
13...	70	630	7.9	20.5	35	4	8.3	90
20...	87	630	7.8	18.0	25	2	8.5	89
27...	81	465	7.6	18.5	90	2	8.7	92

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	610	38	20	2	4	50	7	.00	1
14...	270	28	--	--	--	--	--	--	--
AUG.									
16...	930	80	0	4	9	10	5	.00	0

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	48	20	2.6	47	35	4.4	301	13	11
2	43	20	2.3	57	35	5.4	276	9	6.7
3	40	23	2.5	56	35	5.3	266	10	7.2
4	40	52	5.6	55	35	5.2	223	10	6.0
5	38	68	7.0	56	28	4.2	128	27	9.3
6	37	54	5.4	59	20	3.2	131	30	11
7	36	61	5.9	59	13	2.1	304	106	105
8	37	59	5.9	57	11	1.7	611	323	533
9	54	50	7.3	58	10	1.6	446	84	101
10	65	43	7.5	67	16	2.9	312	47	40
11	60	43	7.0	70	33	6.2	317	52	45
12	54	50	7.3	70	48	9.1	406	42	46
13	55	40	5.9	70	21	4.0	384	25	26
14	62	33	5.5	71	17	3.3	839	68	229
15	76	33	6.8	69	17	3.2	2580	382	2660
16	76	33	6.8	67	18	3.3	2340	246	1550
17	74	33	6.6	69	19	3.5	1530	130	537
18	67	33	6.0	75	18	3.6	950	63	162
19	60	34	5.5	83	16	3.6	652	37	65
20	56	35	5.3	92	15	3.7	551	28	42
21	54	40	5.8	92	14	3.5	575	47	73
22	54	36	5.2	99	12	3.2	531	21	30
23	55	34	5.0	106	9	2.6	478	15	19
24	60	34	5.5	89	8	1.9	453	15	18
25	60	35	5.7	83	11	2.5	425	16	18
26	58	35	5.5	82	21	4.6	419	16	18
27	56	35	5.3	128	54	24	422	17	19
28	54	35	5.1	250	44	30	422	17	19
29	51	35	4.8	263	21	15	425	17	20
30	50	35	4.7	287	17	13	1830	266	1710
31	49	35	4.6	--	--	--	2630	352	2500
TOTAL	1679	--	171.9	2786	--	179.8	22157	--	10636.2

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1910	189	975	150	55	22	845	107	326
2	1340	103	373	150	53	21	3210	375	3250
3	990	72	192	160	43	19	2880	258	2010
4	890	54	130	140	29	11	2120	102	584
5	965	40	104	120	21	6.8	1390	40	150
6	760	41	84	120	19	6.2	850	20	46
7	642	32	55	130	16	5.6	638	16	28
8	535	25	36	120	15	4.9	638	15	26
9	750	40	95	110	15	4.5	580	15	23
10	1660	92	412	110	15	4.5	460	13	16
11	1330	68	244	121	15	4.9	357	13	13
12	875	42	99	122	15	4.9	279	12	9.0
13	674	22	40	133	15	5.4	427	33	51
14	531	13	19	166	18	8.1	1550	175	732
15	320	12	10	550	59	96	1310	92	325
16	230	12	7.5	760	66	135	980	43	114
17	230	12	7.5	430	32	37	985	39	104
18	350	12	11	330	18	16	706	38	72
19	310	12	10	250	14	9.5	464	37	46
20	270	12	8.7	180	13	6.3	366	35	35
21	270	13	9.5	200	13	7.0	340	31	28
22	290	23	18	190	13	6.7	488	28	37
23	450	37	45	170	12	5.5	820	26	58
24	700	45	85	166	11	4.9	616	21	35
25	500	38	51	160	9	3.9	450	14	17
26	340	28	26	168	8	3.6	369	12	12
27	250	30	20	166	8	3.6	396	15	16
28	210	36	20	166	10	4.5	895	42	101
29	180	41	20	295	32	28	825	22	49
30	160	46	20	--	--	--	634	19	33
31	140	51	19	--	--	--	499	17	23
TOTAL	19052	--	3246.2	6033	--	496.3	27367	--	8369.0

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	419	14	16	478	82	106	706	53	101
2	375	16	16	422	72	82	470	42	53
3	331	18	16	393	64	68	354	41	39
4	363	10	9.8	369	54	54	290	43	34
5	378	8	8.2	346	46	43	276	46	34
6	340	10	9.2	282	36	27	238	51	33
7	3810	451	5460	274	28	21	233	58	36
8	3870	430	4490	439	41	52	202	60	33
9	2850	250	1920	2800	282	2320	184	60	30
10	2250	126	765	3190	181	1560	200	60	32
11	1700	81	372	2170	93	545	233	60	38
12	1280	69	238	1540	56	233	162	60	26
13	3240	594	5620	1170	73	231	195	76	40
14	3940	958	10200	1240	210	675	635	116	199
15	2990	400	3230	3720	975	9790	611	125	206
16	2880	315	2450	3490	192	1810	755	258	526
17	2970	386	3100	2410	122	794	527	188	268
18	2440	244	1610	1750	102	482	372	107	107
19	1850	113	564	1230	83	276	295	100	80
20	4230	539	6310	905	63	154	238	100	64
21	4280	430	4970	656	52	92	484	176	263
22	5160	276	3850	515	51	71	825	276	615
23	4490	207	2510	439	50	59	559	164	248
24	3530	132	1260	360	50	49	396	86	92
25	2540	113	775	323	49	43	279	87	66
26	1870	112	565	301	49	40	230	102	63
27	1310	110	389	258	49	34	195	100	53
28	895	108	261	236	49	31	176	95	45
29	660	100	178	230	49	30	258	115	91
30	527	90	128	276	49	37	357	135	130
31	--	--	--	622	55	92	--	--	--
TOTAL	67768	--	61290.2	32834	--	20101	10935	--	3645

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	246	95	63	87	76	18	54	92	13
2	202	91	50	85	78	18	49	88	12
3	803	342	983	134	106	38	57	85	13
4	1580	400	1710	156	80	34	66	83	15
5	1240	128	429	137	57	21	63	80	14
6	805	97	211	106	68	19	57	84	13
7	492	91	121	98	90	24	51	80	11
8	348	90	85	94	103	26	48	78	10
9	292	90	71	93	106	27	49	78	10
10	540	159	232	87	105	25	50	78	11
11	410	154	170	80	107	23	49	72	9.5
12	282	120	91	76	112	23	125	59	20
13	228	92	57	74	117	23	182	48	24
14	200	77	42	76	122	25	138	50	19
15	176	73	35	76	127	26	221	54	32
16	550	112	183	76	125	26	150	52	21
17	495	102	136	74	109	22	105	53	15
18	314	99	84	71	82	16	93	50	13
19	266	98	70	104	67	19	105	47	13
20	228	94	58	92	64	16	96	49	13
21	184	90	45	79	62	13	83	55	12
22	164	90	40	72	63	12	71	55	11
23	154	92	38	75	63	13	189	124	80
24	142	93	36	74	65	13	527	160	228
25	129	84	29	72	67	13	474	131	168
26	135	69	25	67	69	12	680	152	279
27	126	83	28	66	70	12	1590	248	1060
28	122	100	33	64	72	12	1390	149	559
29	121	82	27	63	91	15	930	58	146
30	108	80	23	59	99	16	1840	118	586
31	96	82	21	55	95	14	--	--	--
TOTAL	11178	--	5226	2622	--	614	9582	--	3430.5

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	213993
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	117406.1

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 15, 1971	1815	9.0	2910	408	3210	55	68	79	89	94	97	98	98	100	--	--
APR. 17, 1972	1830	15.0	2850	348	2680	79	92	94	97	99	100	--	--	--	--	--
APR. 21......	1730	9.0	4070	387	4250	81	89	92	96	97	98	100	--	--	--	--
MAY 15......	1110	14.0	3780	1140	11600	79	90	96	98	99	100	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP. 20...	1030	2	0	0	0	1	4	8	13	16	22	42

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec.24, T.11 N., R.4 E., Shelby County, at gaging station on right bank at downstream side of bridge on Cardo Roman Road, 1.1 miles northwest of Newport, 3 miles south of Fort Loramie, and 3 miles downstream from Mile Creek.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-67, 1969-72 (partial-record station).
Water temperatures: Water years 1968-70, 1972 (partial-record station).
Sediment records: October 1967 to September 1972.

EXTREMES.--1970-71:
Sediment concentrations: Maximum daily, 1,010 mg/l Apr. 20; minimum daily, 6 mg/l Dec. 5.
Sediment discharges: Maximum daily, 3,720 tons Apr. 20; minimum daily, 0.06 ton Nov. 26.

Period of record:
Sediment concentrations: Maximum daily, 1,010 mg/l Apr. 20, 1972; minimum daily, 3 mg/l Jan. 12, 1971.
Sediment discharges: Maximum daily, 3,720 tons Apr. 20, 1972; minimum daily, 0.02 ton Feb. 1-3, 1971.

REMARKS.--Flow affected by ice Jan. 24 to Feb. 10, Feb. 17-26, Mar. 7-11. Some regulation by Lake Loramie 5 miles upstream (capacity 13,000 acre-ft).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
DEC., 1971									
15...	1615	1340	--	--	--	--	--	--	--
30...	1700	1100	--	--	--	--	--	--	--
MAR., 1972									
02...	1235	1450	--	--	--	--	--	--	--
APR.									
17...	1620	1200	--	--	--	--	--	--	--
SEP.									
07...	1145	1.1	290	4	300	180	.9	1.1	5.0
20...	1200	13	--	--	--	--	--	--	--

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
DEC., 1971								
15...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	6.0
MAR., 1972								
02...	--	--	--	--	--	--	--	2.0
APR.								
17...	--	--	--	--	--	--	--	15.5
SEP.								
07...	.68	2.1	1010	530	290	1480	8.3	18.0
20...	--	--	--	--	--	--	--	20.5

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT BETWEEN 0700 AND 1000)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	2.0	0.0	---	5.0	16.0	14.0	---	21.0	---
2	---	---	---	4.0	---	4.0	---	---	16.0	---	22.0	---
3	---	---	---	2.0	1.0	1.0	---	---	18.0	20.0	---	---
4	---	---	0.0	3.0	---	2.0	---	---	20.0	18.0	---	---
5	---	---	---	0.0	---	3.0	---	---	20.0	19.0	---	16.0
6	13.0	15.0	---	---	---	---	---	---	22.0	17.0	---	---
7	---	---	6.0	---	0.0	---	3.0	---	20.0	18.0	---	---
8	---	---	6.0	---	---	---	2.0	15.0	24.0	19.0	18.0	---
9	---	---	6.0	---	---	---	3.0	10.0	20.0	21.0	---	---
10	---	---	8.0	3.0	0.0	---	6.0	10.0	17.0	22.0	---	---
11	---	---	---	3.0	---	---	---	12.0	15.0	22.0	---	---
12	---	5.0	---	1.0	---	9.0	---	15.0	---	24.0	---	21.0
13	---	8.0	---	5.0	---	---	13.0	15.0	---	24.0	---	21.0
14	11.0	---	---	---	---	4.0	12.0	14.0	22.0	30.0	---	21.0
15	---	---	9.0	---	2.0	3.0	15.0	14.0	---	25.0	25.0	18.0
16	15.0	---	7.0	---	1.0	5.0	15.0	14.0	22.0	23.0	---	18.0
17	---	---	5.0	---	1.0	5.0	12.0	14.0	---	21.0	---	20.0
18	---	---	0.0	---	2.0	---	14.0	17.0	---	24.0	---	21.5
19	---	---	---	---	---	---	15.0	18.0	---	24.0	---	20.0
20	---	7.0	2.0	2.0	---	---	---	18.0	---	24.0	---	18.0
21	---	---	---	---	---	---	10.0	19.0	---	26.0	---	17.0
22	---	---	---	---	---	---	10.0	20.0	---	27.0	22.0	16.0
23	17.0	---	---	---	---	---	10.0	20.0	15.0	26.0	---	15.0
24	---	---	---	---	---	---	10.0	20.0	---	25.0	---	16.0
25	---	---	3.0	---	0.0	---	8.0	20.0	---	24.0	---	18.0
26	---	---	---	---	---	---	9.0	---	---	---	---	19.0
27	---	3.0	---	0.0	---	---	10.0	---	---	---	---	20.0
28	---	---	---	---	---	---	11.0	---	22.0	---	---	17.0
29	---	---	---	---	---	---	14.0	---	---	---	24.0	18.0
30	16.0	---	8.0	---	---	3.0	14.0	---	19.0	---	---	15.0
31	---	---	4.0	---	---	6.0	---	15.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	44	1.5	7.1	65	1.2	38	8	.82
2	10	36	.97	6.5	62	1.1	28	8	.60
3	7.7	33	.69	7.7	58	1.2	21	8	.45
4	5.7	31	.48	5.7	55	.85	16	7	.30
5	4.8	47	.61	3.7	52	.52	14	6	.23
6	3.9	63	.66	3.1	49	.41	34	24	3.2
7	3.3	51	.45	3.5	34	.32	214	190	116
8	2.8	50	.38	3.0	20	.16	363	80	78
9	3.9	59	.62	11	34	1.9	217	35	21
10	5.2	58	.81	11	31	.92	133	38	14
11	3.7	50	.50	3.5	27	.26	109	38	11
12	3.0	50	.41	2.5	28	.19	85	38	8.7
13	2.7	51	.37	2.4	38	.25	59	38	6.1
14	14	72	2.7	2.2	40	.24	229	457	457
15	21	102	5.8	2.1	40	.23	1200	342	1020
16	20	98	5.3	1.8	40	.19	1260	106	361
17	27	88	6.4	1.8	40	.19	716	85	164
18	19	81	4.2	1.5	40	.16	271	85	62
19	14	76	2.9	2.6	40	.28	147	66	26
20	11	75	2.2	3.3	38	.34	144	66	26
21	9.8	75	2.0	3.1	25	.21	171	65	30
22	17	99	4.5	3.0	17	.14	133	64	23
23	28	91	6.9	2.5	14	.09	116	63	20
24	27	79	5.8	2.4	13	.08	112	62	19
25	22	76	4.5	2.4	12	.08	102	60	17
26	20	75	4.1	2.2	10	.06	103	60	17
27	20	75	4.1	6.6	8	.14	100	60	16
28	18	74	3.6	9.8	8	.21	98	60	16
29	12	73	2.4	14	8	.30	93	60	15
30	9.5	72	1.8	33	8	.71	758	535	1320
31	9.1	68	1.7	--	--	--	1680	288	1310
TOTAL	388.1	--	79.35	165.0	--	12.93	8764	--	5179.40

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1090	191	562	25	15	1.0	169	249	194
2	516	192	267	25	13	.88	1340	592	2150
3	428	166	192	27	12	.87	1630	124	546
4	383	125	129	22	12	.71	803	102	221
5	240	93	60	20	12	.65	303	92	75
6	186	62	31	19	11	.56	170	104	48
7	144	44	17	20	10	.54	100	102	28
8	105	41	12	16	10	.43	74	100	20
9	192	93	64	14	10	.38	54	97	14
10	580	146	229	12	10	.32	44	90	11
11	495	115	154	12	10	.32	44	84	10
12	333	95	85	13	10	.35	48	78	10
13	300	79	64	18	10	.49	100	80	22
14	190	56	29	39	13	1.4	279	108	81
15	33	32	2.9	212	43	25	226	98	60
16	25	23	1.6	174	32	15	195	80	42
17	26	18	1.3	84	18	4.1	176	74	35
18	29	17	1.3	48	18	2.3	126	68	23
19	35	16	1.5	38	17	1.7	88	64	15
20	41	15	1.7	32	14	1.2	69	59	11
21	54	15	2.2	28	13	.98	60	55	8.9
22	102	27	9.7	25	12	.81	82	50	11
23	177	43	21	23	10	.62	115	46	14
24	110	40	12	22	9	.53	96	41	11
25	92	40	9.9	21	8	.45	78	40	8.4
26	74	41	8.2	22	8	.48	61	40	6.6
27	60	39	6.3	18	8	.39	109	42	12
28	45	34	4.1	20	8	.43	303	50	41
29	37	29	2.9	40	13	1.4	234	45	28
30	32	24	2.1	--	--	--	219	47	28
31	28	19	1.4	--	--	--	172	57	26
TOTAL	6182	--	1985.1	1089	--	64.29	7567	--	3810.9

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	122	53	17	30	98	7.9	134	110	40
2	88	52	12	35	88	8.3	83	106	24
3	71	51	9.8	34	79	7.3	55	115	17
4	79	50	11	32	72	6.2	41	108	12
5	74	50	10	27	70	5.1	28	100	7.6
6	72	55	11	21	70	4.0	23	96	6.0
7	1220	552	1780	24	72	4.7	21	130	7.4
8	1800	219	1060	79	118	25	14	117	4.4
9	1080	162	472	346	207	203	12	113	3.7
10	543	159	233	370	120	120	18	114	5.5
11	317	95	81	188	113	57	10	104	2.8
12	216	57	33	112	117	35	6.7	95	1.7
13	1100	748	2100	92	129	32	19	87	4.5
14	1460	258	1020	287	212	207	72	83	16
15	797	503	1080	928	481	1210	67	89	16
16	705	561	1070	722	142	277	87	91	21
17	1220	447	1470	354	105	100	58	88	14
18	654	375	662	196	104	55	31	86	7.2
19	311	344	289	126	98	33	22	85	5.0
20	1560	1010	3720	86	92	21	17	85	3.9
21	1940	294	1540	60	83	13	88	112	27
22	1950	374	1970	48	67	8.7	180	113	55
23	1700	287	1320	36	64	6.2	105	88	25
24	942	276	702	30	80	6.5	64	85	15
25	400	265	286	25	87	5.9	43	87	10
26	220	244	145	19	81	4.2	31	87	7.3
27	152	223	92	14	80	3.0	24	87	5.6
28	116	233	73	12	80	2.6	18	88	4.3
29	75	212	43	10	80	2.2	18	90	4.4
30	30	120	9.7	44	91	11	48	123	16
31	--	--	--	148	126	50	--	--	--
TOTAL	21014	--	21321.5	4535	--	2531.8	1437.7	--	389.3

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	31	87	7.3	2.2	66	.39	.94	68	.17
2	17	85	3.9	2.2	68	.40	1.7	74	.34
3	304	447	441	7.4	72	1.4	2.2	81	.48
4	592	174	278	4.7	76	.96	3.2	87	.75
5	287	111	86	3.0	80	.65	2.2	89	.53
6	140	123	46	2.4	83	.54	1.7	81	.37
7	76	90	18	2.2	88	.52	1.1	71	.21
8	51	87	12	2.1	85	.48	.71	65	.12
9	34	89	8.2	2.1	62	.35	.71	60	.12
10	46	151	19	1.6	58	.28	.71	56	.11
11	41	163	18	1.7	58	.27	.66	51	.09
12	22	124	7.4	1.7	59	.27	34	78	7.3
13	16	100	4.3	2.0	60	.32	115	132	41
14	16	92	4.0	1.6	61	.26	104	151	42
15	12	72	2.3	1.8	63	.31	132	152	54
16	46	100	12	2.1	68	.39	33	140	12
17	36	102	9.9	2.1	73	.41	13	112	3.9
18	20	108	5.8	2.1	78	.44	13	93	3.3
19	100	189	62	2.1	83	.47	80	132	36
20	92	260	65	2.7	88	.64	20	96	5.8
21	31	215	18	2.0	94	.51	6.0	97	1.6
22	17	140	6.4	2.0	98	.53	4.4	93	1.1
23	12	83	2.7	3.6	90	.87	165	245	195
24	8.5	81	1.9	3.4	83	.76	662	218	390
25	7.4	86	1.7	2.4	75	.49	357	99	95
26	5.6	82	1.2	1.7	68	.31	582	201	367
27	4.4	77	.91	1.5	62	.25	1100	128	380
28	3.9	73	.77	1.1	54	.16	823	67	149
29	3.2	72	.62	1.0	51	.14	419	124	148
30	2.7	70	.51	1.0	55	.15	916	140	346
31	2.4	67	.43	.94	62	.16	--	--	--
TOTAL	2077.1	--	1145.24	70.64	--	14.08	5594.23	--	2281.29

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	58883.77
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	38815.18

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEM-PERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 15, 1971	1615	--	1340	180	651	70	82	85	89	93	96	98	100	--	--	--
DEC. 30......	1700	6.0	1100	854	2540	76	84	89	94	95	99	100	--	--	--	--
MAR. 2, 1972	1235	2.0	1450	790	3090	68	85	90	94	95	96	100	--	--	--	--
APR. 17......	1620	15.5	1200	406	1320	86	95	98	99	99	99	99	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
SEP. 20...	1200	1	28	44	64	78	86	89	94	100

03263110 GREAT MIAMI RIVER NEAR TAYLORSVILLE DAM, AT TAYLORSVILLE, OHIO

LOCATION.--Lat 39°52'00", long 84°10'02", Montgomery County, at Interstate Highway 70 Bridge, 0.2 mile north of Taylorsville, 0.5 mile downstream from gaging station, and 0.7 mile downstream from Taylorsville Dam.

DRAINAGE AREA.--1,149 sq mi (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT.								
06...	1045	89	302	0	74	52	--	.050
13...	1045	108	304	0	77	54	.6	.15
20...	1105	150	314	0	78	44	--	.070
27...	1015	150	318	0	79	50	--	.15
NOV.								
10...	1045	123	334	0	78	50	--	.12
DEC.								
15...	1145	5270	162	0	50	18	--	.20
JAN.								
19...	1015	1020	286	0	98	30	--	.050
FEB.								
16...	1020	1540	248	0	69	38	--	.060
MAR.								
15...	1050	2510	218	0	72	24	--	.080
APR.								
19...	1040	3090	200	0	57	20	--	.16
MAY								
17...	0915	4950	194	0	50	16	--	.12
JUNE								
21...	1000	490	282	0	71	32	--	.090
JULY								
05...	1020	2230	166	0	44	22	--	.28
12...	0935	641	246	0	63	24	--	.090
19...	0910	512	248	0	59	28	--	.060
26...	0945	226	310	0	71	36	--	.030
AUG.								
02...	0905	163	316	6	79	44	--	.020
09...	0935	203	318	0	77	44	--	.070
16...	1020	148	292	0	78	42	.6	.040
23...	0734	141	272	0	72	40	--	.070
30...	0920	104	313	0	78	50	--	.050
SEP.								
06...	0915	114	322	0	84	48	--	.060
13...	0915	319	280	0	70	48	--	.080
20...	1000	192	272	0	67	37	--	.060
27...	0915	3060	204	0	60	20	--	.12

DATE	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.								
06...	82	761	7.7	18.5	15	2	8.8	94
13...	80	792	7.7	13.5	15	2	7.7	73
20...	82	740	7.5	16.5	10	0	7.3	74
27...	89	781	7.6	16.0	10	2	6.4	64
NOV.								
10...	76	810	7.8	5.5	7	4	10.1	80
DEC.								
15...	77	413	7.6	6.5	150	2	10.6	86
JAN.								
19...	120	683	7.8	.0	10	2	12.0	82
FEB.								
16...	86	620	8.0	.0	35	2	12.2	84
MAR.								
15...	100	568	7.8	5.0	70	2	12.0	94
APR.								
19...	56	482	7.9	14.5	130	2	9.1	88
MAY								
17...	81	465	7.7	13.5	85	2	9.1	87
JUNE								
21...	120	648	8.0	21.0	15	2	7.5	83
JULY								
05...	94	520	7.8	18.5	290	2	7.1	76
12...	88	571	7.8	23.5	60	2	6.8	79
19...	76	566	7.9	24.5	50	2	6.5	77
26...	86	677	8.3	24.0	25	2	7.0	82
AUG.								
02...	100	726	8.3	23.0	25	2	7.4	85
09...	59	712	8.1	20.0	25	2	7.4	80
16...	90	684	8.2	22.0	25	4	7.4	84
23...	86	663	7.5	23.5	35	2	4.6	53
30...	93	752	7.8	22.5	20	4	5.8	66
SEP.								
06...	96	775	8.0	19.5	20	2	7.3	78
13...	80	687	7.8	22.0	25	4	6.3	72
20...	76	635	7.8	20.0	20	2	6.5	71
27...	92	500	7.6	19.0	130	2	8.5	90

03263110 GREAT MIAMI RIVER NEAR TAYLORSVILLE DAM, AT TAYLORSVILLE, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: November 1961 to July 1963, July 1966 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. Records of discharge are given for Great Miami River at Taylorsville, Ohio (station 03263000).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.									
06...	.16	1.4	6.4	.05	.06	1.2	3.7	436	330
13...	.48	4.0	18	.36	.46	1.5	4.5	456	330
20...	.23	2.6	12	.08	.10	1.0	3.1	442	340
27...	.48	2.1	9.4	.43	.55	1.4	4.3	462	350
NOV.									
10...	.39	3.2	14	.82	1.1	1.4	4.1	482	350
DEC.									
15...	.66	4.0	18	.15	.20	1.4	4.4	256	210
JAN.									
19...	.16	4.5	20	.36	.46	.37	1.1	431	360
FEB.									
16...	.21	3.5	16	.39	.50	.65	2.0	400	290
MAR.									
15...	.26	6.9	31	.61	.78	.35	1.1	398	280
APR.									
19...	.54	5.0	22	.30	.39	.40	1.2	298	220
MAY									
17...	.38	5.4	24	.22	.28	.32	1.0	302	240
JUNE									
21...	.31	4.8	21	.39	.50	.49	1.5	402	350
JULY									
05...	.94	7.4	33	.39	.50	.58	1.8	312	230
12...	.28	3.2	14	.26	.34	.64	2.0	358	290
19...	.19	3.8	17	.48	.62	.52	1.6	372	280
26...	.11	3.2	14	.32	.41	.76	2.3	428	340
AUG.									
02...	.07	2.0	8.6	1.1	1.4	.92	2.8	479	370
09...	.23	2.0	8.6	1.0	1.3	.85	2.6	464	320
16...	.13	1.7	7.6	.63	.81	.81	2.5	427	330
23...	.22	1.9	8.3	.62	.80	.93	2.8	410	310
30...	.17	2.7	12	.31	.40	1.4	4.3	464	350
SEP.									
06...	.18	2.8	12	.82	1.1	1.2	3.7	470	360
13...	.26	2.1	9.5	.70	.90	1.2	3.6	425	310
20...	.18	2.4	10	.59	.76	.83	2.5	401	300
27...	.41	2.6	12	.48	.62	.62	1.9	311	260

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	360	20	6	6	28	90	7	.01	2
14...	150	44	--	--	--	--	--	--	--
AUG.									
16...	630	90	0	5	8	30	5	.00	0

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec.18, T.7 N., R.5 E., Miami County, at gaging station on left bank at downstream side of bridge on Laurer Road, 0.8 mile northwest of Pleasant Hill, 2 miles downstream from Painter Creek, and 2 miles upstream from Canyon Run.

DRAINAGE AREA.--503 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-68, 1970-72 (partial-record station).
Water temperatures: October 1964 to September 1966.
Sediment records: October 1963 to September 1972.

EXTREMES.--1971-72:
Sediment concentrations: Maximum daily, 1,130 mg/l Apr. 7; minimum daily, 4 mg/l on many days during November and December.
Sediment discharges: Maximum daily, 15,100 tons Apr. 7; minimum daily, 0.43 ton Nov. 23, 25.

Period of record:
Sediment concentrations: Maximum daily, 1,970 mg/l June 26, 1971; minimum daily, 1 mg/l on several days during January 1966.
Sediment discharges: Maximum daily, 21,400 tons Apr. 21, 1964; minimum daily, 0.07 ton Aug. 21, 1965.

REMARKS.--Flow affected by ice Jan. 6-8, 13-20, Jan. 25 to Feb. 3, Feb. 6-12, 17-25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
DEC., 1971									
15...	1410	3530	--	--	--	--	--	--	--
31...	1000	3840	--	--	--	--	--	--	--
MAR., 1972									
03...	0835	3530	--	--	--	--	--	--	--
APR.									
17...	1440	2740	--	--	--	--	--	--	--
SEP.									
06...	1340	36	290	24	79	33	.3	.70	3.2
19...	1400	87	--	--	--	--	--	--	--

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
DEC., 1971								
15...	--	--	--	--	--	--	--	9.5
31...	--	--	--	--	--	--	--	5.5
MAR., 1972								
03...	--	--	--	--	--	--	--	1.0
APR.								
17...	--	--	--	--	--	--	--	15.0
SEP.								
06...	.32	.98	446	360	82	683	8.7	19.5
19...	--	--	--	--	--	--	--	22.0

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	54	20	2.9	42	6	.68	62	4	.67
2	48	19	2.5	38	6	.62	55	4	.59
3	41	19	2.1	42	6	.68	50	4	.54
4	37	18	1.8	41	6	.66	46	4	.50
5	34	17	1.6	40	6	.65	45	4	.49
6	31	17	1.4	41	5	.55	56	4	.60
7	30	16	1.3	43	5	.58	120	7	2.3
8	31	15	1.3	44	4	.48	348	26	24
9	40	14	1.5	45	4	.49	258	28	20
10	49	14	1.9	45	4	.49	177	15	7.2
11	45	13	1.6	45	4	.49	145	9	3.5
12	38	13	1.3	46	4	.50	133	8	2.9
13	38	12	1.2	42	4	.45	115	7	2.2
14	53	12	1.7	42	4	.45	246	48	82
15	58	11	1.7	42	4	.45	2990	549	4450
16	59	11	1.8	41	4	.44	2320	233	1460
17	61	11	1.8	42	4	.45	1020	98	270
18	51	10	1.4	42	4	.45	618	36	60
19	45	10	1.2	50	4	.54	415	26	29
20	42	10	1.1	48	4	.52	340	23	21
21	40	10	1.1	49	4	.53	299	22	18
22	46	10	1.2	41	4	.44	272	20	15
23	47	9	1.1	40	4	.43	236	19	12
24	63	9	1.5	42	4	.45	224	18	11
25	77	8	1.7	40	4	.43	197	17	9.0
26	71	8	1.5	43	4	.46	186	16	8.0
27	71	8	1.5	52	4	.56	186	15	7.5
28	60	8	1.3	56	4	.60	179	15	7.2
29	54	7	1.0	56	4	.60	165	15	6.7
30	52	7	.98	60	4	.65	1480	373	2750
31	47	7	.89	--	--	--	3180	617	5730
TOTAL	1513	--	46.87	1340	--	15.77	16163	--	15011.89

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1130	196	598	140	39	15	606	84	184
2	787	92	195	150	37	15	3900	498	5400
3	787	55	117	130	35	12	2910	444	3930
4	690	42	78	120	33	11	1170	110	347
5	878	50	119	113	32	9.8	756	33	67
6	550	28	42	110	30	8.9	507	16	22
7	430	24	28	110	28	8.3	436	10	12
8	330	20	18	100	28	7.6	400	8	8.6
9	430	26	37	95	28	7.2	340	6	5.5
10	1210	72	235	90	28	6.8	290	6	4.7
11	871	20	47	95	28	7.2	267	6	4.3
12	600	15	24	100	28	7.6	272	6	4.4
13	400	15	16	123	28	9.3	375	48	59
14	260	15	11	156	30	13	920	125	311
15	150	15	6.1	405	54	59	666	42	76
16	160	15	6.5	513	58	80	546	28	41
17	180	15	7.3	300	42	34	612	24	40
18	240	15	9.7	220	32	19	552	21	31
19	260	15	11	180	28	14	425	21	24
20	250	15	10	160	25	11	355	20	19
21	272	15	11	170	25	11	330	20	18
22	375	25	25	150	25	10	400	20	22
23	726	59	116	140	25	9.5	380	20	21
24	552	64	95	140	25	9.5	312	20	17
25	360	54	52	140	25	9.5	276	20	15
26	260	51	36	141	25	9.5	258	20	14
27	220	48	29	141	25	9.5	258	20	14
28	190	47	24	138	25	9.3	294	20	16
29	170	45	21	197	30	16	294	20	16
30	160	43	19	--	--	--	290	20	16
31	150	41	17	--	--	--	249	20	13
TOTAL	14028	--	2060.6	4767	--	449.5	19646	--	10772.5

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	228	20	12	436	15	18	470	46	58
2	208	20	11	405	15	16	331	27	24
3	190	20	10	345	15	14	263	19	13
4	208	20	11	308	15	12	217	17	10
5	216	20	12	272	15	11	175	17	8.0
6	208	20	11	240	15	9.7	174	17	8.0
7	4170	1130	15100	228	15	9.2	175	17	8.0
8	5030	610	8770	441	36	61	166	17	7.6
9	2010	204	1110	1680	129	585	160	17	7.3
10	1370	89	329	1190	73	235	184	17	8.4
11	990	53	142	666	25	45	187	17	8.6
12	780	47	99	485	15	20	145	17	6.7
13	1850	465	2370	452	15	18	410	72	173
14	1220	203	727	758	68	166	2250	660	4010
15	768	18	37	1710	370	1710	1110	200	599
16	1930	309	2580	1870	455	2300	1370	138	510
17	3030	389	3560	1020	142	415	776	65	136
18	1260	114	388	684	76	140	495	24	32
19	829	63	141	508	70	96	376	20	20
20	2330	562	5030	405	59	65	314	20	17
21	2290	355	2510	355	47	45	277	20	15
22	4960	419	5610	303	34	28	243	20	13
23	3470	231	2290	267	22	16	217	20	12
24	1530	109	450	236	15	9.6	207	20	11
25	976	57	150	208	15	8.4	190	20	10
26	720	37	72	182	15	7.4	172	20	9.3
27	582	25	39	176	15	7.1	158	20	8.5
28	485	20	26	174	15	7.0	143	20	7.7
29	425	17	20	171	15	6.9	154	20	8.3
30	395	15	16	201	21	11	156	20	8.4
31	--	--	--	576	85	132	--	--	--
TOTAL	44658	--	51633	16952	--	6224.3	11665	--	5767.8

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	149	20	8.0	51	29	4.0	28	22	1.7
2	131	20	7.1	49	29	3.8	29	23	1.8
3	144	24	9.3	59	30	4.8	32	24	2.1
4	409	544	663	74	32	6.4	39	26	2.7
5	223	215	138	66	31	5.5	41	26	2.9
6	158	54	23	57	30	4.6	37	25	2.5
7	130	46	16	53	29	4.1	31	24	2.0
8	117	44	14	52	29	4.1	27	22	1.6
9	113	43	13	56	30	4.5	27	22	1.6
10	107	42	12	55	30	4.5	28	22	1.7
11	101	40	11	49	29	3.8	33	25	2.2
12	95	38	9.7	48	28	3.6	111	40	12
13	94	37	9.4	55	30	4.5	506	198	271
14	92	36	8.9	46	27	3.4	411	156	173
15	87	36	8.5	49	29	3.8	442	189	226
16	122	43	14	58	31	4.9	201	140	76
17	143	49	19	51	29	4.0	118	92	29
18	118	44	14	42	26	2.9	90	54	13
19	112	40	12	47	28	3.6	88	37	8.8
20	125	44	15	52	29	4.1	78	35	7.4
21	117	44	14	47	28	3.6	75	33	6.7
22	131	48	17	43	27	3.1	64	31	5.4
23	84	34	7.7	39	26	2.7	353	80	145
24	82	34	7.5	38	25	2.6	2620	350	2480
25	99	37	9.9	41	26	2.9	1030	135	375
26	77	33	6.9	37	25	2.5	1070	134	433
27	74	32	6.4	35	24	2.3	2050	190	1050
28	65	31	5.4	32	24	2.1	806	95	207
29	61	30	4.9	31	24	2.0	509	65	89
30	57	30	4.6	30	23	1.9	1430	131	545
31	50	29	3.9	30	23	1.9	--	--	--
TOTAL	3667	--	1113.1	1472	--	112.5	12404	--	6175.1

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	148275
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	99382.93

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 15, 1971	1410	9.5	3530	569	5420	61	75	82	90	96	98	100	--	--	--	--
DEC. 31......	1000	5.5	3840	653	6770	83	90	96	98	100	--	--	--	--	--	--
MAR. 3, 1972	0835	1.0	3530	590	5620	86	91	94	98	99	99	100	--	--	--	--
APR. 17......	1440	15.0	2740	313	2320	67	82	85	93	96	99	100	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP. 19...	1400	2	1	2	5	14	24	38	56	76	96	100

03266000 STILLWATER RIVER AT ENGLEWOOD, OHIO

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec.23, T.5 N., R.5 E., Montgomery County, at gaging station on right bank, 1,000 ft downstream from Englewood Dam, 1 mile southeast of Englewood, and 8.5 miles upstream from mouth. Sampling site about 0.8 mile downstream at bridge on Interstate Highway 70.

DRAINAGE AREA.--650 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT.								
06...	1110	39	276	0	73	30	--	.080
13...	1110	47	276	0	69	28	.3	.040
20...	1050	58	312	0	70	32	--	.030
27...	1040	74	322	0	70	36	--	.050
NOV.								
10...	1110	49	356	0	84	36	--	.050
DEC.								
15...	1215	2270	290	0	100	30	--	.10
JAN.								
19...	1030	353	344	0	100	36	--	.040
FEB.								
16...	1040	636	298	0	80	42	--	.050
MAR.								
15...	1115	1010	258	0	75	29	--	.060
APR.								
19...	1110	1290	240	0	49	22	--	.070
MAY								
17...	1000	2090	200	0	51	20	--	.20
JUNE								
21...	1030	400	296	0	64	26	--	.050
JULY								
05...	1105	384	306	0	72	30	--	.040
12...	1010	140	294	0	63	32	--	.060
19...	0940	164	312	0	73	32	--	.020
26...	1025	121	314	0	68	32	--	.070
AUG.								
02...	0945	68	298	6	62	38	--	.020
09...	0955	82	288	0	72	36	--	.050
16...	1050	58	260	0	69	36	.4	.040
23...	0755	60	242	0	62	34	--	<.040
30...	0945	41	285	12	65	38	--	.060
SEP.								
06...	0940	48	310	0	64	43	--	.060
13...	0945	106	276	10	44	42	--	.080
20...	1030	94	194	0	51	28	--	.080
27...	0950	2470	202	0	55	22	--	.12

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.								
06...	74	650	7.7	19.5	25	2	7.7	83
13...	64	634	7.7	13.0	20	2	9.8	92
20...	64	673	7.7	16.5	20	2	8.0	82
27...	66	708	7.7	16.0	20	2	7.3	73
NOV.								
10...	78	774	7.9	5.0	6	4	11.0	86
DEC.								
15...	130	714	7.8	6.5	110	2	11.4	93
JAN.								
19...	140	805	8.0	.5	10	2	13.4	93
FEB.								
16...	100	713	8.0	.0	7	2	13.6	93
MAR.								
15...	130	679	7.9	5.0	35	2	12.1	94
APR.								
19...	100	595	8.0	14.0	65	2	9.6	92
MAY								
17...	110	516	7.7	13.5	190	4	9.7	92
JUNE								
21...	130	674	8.1	20.0	30	2	8.2	89
JULY								
05...	98	662	8.1	20.5	30	0	7.3	80
12...	88	659	8.1	24.5	30	0	7.9	94
19...	84	664	8.2	26.0	35	2	7.1	86
26...	82	672	8.1	24.5	35	2	6.0	71
AUG.								
02...	96	654	8.3	23.0	25	2	6.0	69
09...	110	704	7.6	19.0	25	4	7.2	76
16...	66	604	8.0	22.0	30	2	5.9	67
23...	61	568	7.8	23.5	55	2	4.5	52
30...	66	657	8.4	22.5	30	2	5.4	61
SEP.								
06...	76	670	7.9	19.0	30	2	5.8	62
13...	67	640	8.2	22.0	25	4	6.7	74
20...	71	490	7.5	20.0	50	2	6.0	65
27...	100	480	7.5	19.0	140	2	8.8	94

03266000 STILLWATER RIVER AT ENGLEWOOD, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1962-63 (partial-record station), July 1966 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.									
06...	.26	1.2	5.3	.08	.11	.58	1.8	378	300
13...	.14	1.9	8.4	.13	.16	.61	1.9	386	290
20...	.09	.6	2.9	.05	.07	.65	2.0	392	320
27...	.15	.8	3.4	.09	.12	.56	1.7	420	330
NOV.									
10...	.17	.6	2.9	.24	.31	.69	2.1	470	370
DEC.									
15...	.32	5.2	23	.30	.39	.78	2.4	466	370
JAN.									
19...	.12	8.4	37	.05	.07	.22	.69	519	420
FEB.									
16...	.15	3.5	16	.13	.17	.29	.89	448	350
MAR.									
15...	.18	8.0	35	.70	.90	.20	.62	435	340
APR.									
19...	.22	9.6	43	.32	.41	.24	.72	354	300
MAY									
17...	.64	8.5	38	.22	.28	.46	1.4	336	270
JUNE									
21...	.15	7.3	32	.50	.64	.27	.82	432	370
JULY									
05...	.13	3.5	15	.74	.95	.34	1.0	450	350
12...	.18	5.3	23	.13	.17	.38	1.2	402	330
19...	.05	1.4	6.2	.54	.70	.41	1.3	406	340
26...	.22	2.7	12	.76	.98	.49	1.5	428	340
AUG.									
02...	.08	1.7	7.6	1.6	2.1	.52	1.6	444	350
09...	.16	.8	3.6	.82	1.1	.50	1.5	456	350
16...	.14	.5	2.3	.87	1.1	.50	1.6	373	280
23...	.14	.2	.8	.47	.61	.53	1.6	352	260
30...	.19	4.3	19	.15	.20	.61	1.9	408	320
SEP.									
06...	.18	.9	3.8	.61	.78	.72	2.2	413	330
13...	.26	.4	1.7	.79	1.0	.53	1.6	392	310
20...	.26	2.8	12	.59	.76	.55	1.7	315	230
27...	.40	4.6	20	.46	.59	.43	1.3	309	270

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	590	48	0	18	20	50	0	.00	0
14...	490	80	--	--	--	--	--	--	--
AUG.									
16...	1000	120	0	8	9	30	0	.00	0

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO

LOCATION.--Lat 39°59'31", long 83°42'53", in NE 1/4 sec.9, R.10, T.5, Clark County, on downstream side of bridge on Moorefield-Catawba Road, at New Moorefield, 1.7 miles downstream from gaging station on Buck Creek near New Moorefield, and 1.3 miles downstream from East Fork Buck Creek.

DRAINAGE AREA.--65.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: July to September 1970 (partial-record station); November 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT.									
12...	1145	25	11	440	150	120	120	120	28
NOV.									
30...	1300	31	12	220	220	20	20	110	32
JAN.									
13...	1345	60	7.1	200	70	42	42	110	35
FEB.									
16...	1315	75	10	300	210	25	13	80	30
APR.									
04...	1415	50	4.4	140	20	33	33	80	32
MAY									
10...	1415	155	12	530	220	65	64	87	37
JUNE									
30...	1200	44	12	150	90	59	49	98	38
AUG.									
09...	1300	35	13	110	100	66	3	92	36
SEP.									
20...	1205	37	14	270	50	76	50	98	40

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT.								
12...	424	463	410	110	719	8.0	11.5	7
NOV.								
30...	470	464	410	110	730	7.9	6.0	3
JAN.								
13...	483	470	420	110	740	8.0	7.5	7
FEB.								
16...	386	368	320	90	598	7.7	4.5	15
APR.								
04...	380	367	330	110	594	7.9	10.5	5
MAY								
10...	422	410	370	110	671	8.1	14.5	14
JUNE								
30...	461	437	400	100	704	8.1	16.5	5
AUG.								
09...	426	419	380	98	675	7.9	15.5	3
SEP.								
20...	456	444	410	110	708	8.0	17.0	5

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO--Continued

PERIOD OF RECORD.--Continued
Water temperatures: December 1970 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since December 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected on an approximate monthly basis. Discharges are computed from the combined discharges of Buck Creek near New Moorefield, Ohio (station 03267950, drainage area 30.5 sq mi), and East Fork Buck Creek near New Moorefield, Ohio (station 03267960, drainage area 28.7 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT. 12...	4.6	1.6	368	0	89	12	.2	3.5	--
NOV. 30...	4.5	2.6	364	0	95	14	.2	3.1	14
JAN. 13...	4.7	1.6	372	0	100	14	.2	3.5	15
FEB. 16...	4.8	2.9	284	0	76	14	.2	2.1	9.5
APR. 04...	8.3	1.3	274	0	54	28	.2	5.5	24
MAY 10...	4.8	2.1	319	0	77	13	.4	4.3	19
JUNE 30...	4.9	1.6	360	0	80	15	.2	2.4	10
AUG. 09...	5.1	2.2	341	0	79	14	.3	2.0	9.0
SEP. 20...	5.0	1.7	366	0	80	14	.3	2.4	11

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	656	621	731	727	730	723	---	---	751	746	850	675
2	652	638	734	709	725	717	---	---	749	742	957	585
3	654	634	722	716	719	714	---	---	749	700	722	643
4	---	---	718	714	717	710	---	---	737	699	729	716
5	---	---	725	714	718	708	---	---	760	722	745	718
6	---	---	724	703	709	672	---	---	731	711	732	724
7	---	---	709	705	769	557	---	---	742	720	742	720
8	---	---	714	705	812	689	---	---	753	726	724	705
9	---	---	722	711	842	804	---	---	739	729	721	712
10	---	---	720	712	978	825	---	---	773	724	728	717
11	---	---	718	713	978	806	736	716	918	739	878	719
12	---	---	719	714	---	---	719	692	967	759	919	718
13	731	713	723	712	---	---	739	681	951	769	981	714
14	724	713	722	713	---	---	706	664	982	748	745	688
15	725	716	725	719	---	---	694	682	926	381	722	710
16	724	689	720	715	---	---	---	---	985	535	---	---
17	736	724	721	713	---	---	---	---	966	615	---	---
18	740	731	721	716	---	---	---	---	949	621	---	---
19	734	729	722	702	---	---	---	---	1010	706	---	---
20	736	725	714	708	---	---	---	---	1020	726	---	---
21	734	729	718	709	---	---	---	---	1090	777	---	---
22	729	725	713	706	---	---	---	---	985	719	---	---
23	734	727	712	707	---	---	---	---	753	733	---	---
24	731	724	716	705	---	---	---	---	747	735	---	---
25	734	731	715	706	---	---	757	742	741	731	---	---
26	740	729	714	707	---	---	759	755	752	723	---	---
27	738	734	718	704	---	---	755	746	737	719	---	---
28	734	729	721	716	---	---	751	748	758	718	739	735
29	738	725	722	702	---	---	757	744	760	705	739	733
30	734	727	730	715	---	---	753	740	---	---	739	728
31	734	731	---	---	---	---	759	737	---	---	741	727
MONTH	---	---	734	702	---	---	---	---	1090	381	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	734	727	718	695	720	711	669	645	703	668	705	683
2	731	722	713	682	724	702	707	654	708	675	706	682
3	731	722	739	695	726	715	763	645	693	660	703	690
4	728	717	736	711	726	706	659	650	701	669	707	683
5	730	710	770	713	719	708	667	636	699	670	731	689
6	734	703	807	697	720	709	---	---	697	670	708	690
7	705	258	824	711	719	711	---	---	707	676	707	685
8	674	552	722	713	719	708	---	---	698	656	709	689
9	718	673	---	---	715	702	---	---	685	661	711	687
10	731	711	---	---	709	704	---	---	692	666	702	686
11	744	724	---	---	709	704	---	---	689	660	704	688
12	741	722	---	---	711	706	---	---	687	662	688	584
13	739	576	---	---	717	691	---	---	688	656	699	608
14	738	714	---	---	722	708	---	---	686	655	705	674
15	738	727	---	---	722	708	---	---	684	657	714	692
16	736	493	---	---	719	713	---	---	680	653	716	707
17	706	565	---	---	715	709	---	---	683	656	718	702
18	737	706	---	---	715	708	670	647	684	653	718	700
19	732	504	---	---	720	711	672	558	684	659	724	704
20	654	471	---	---	717	711	656	600	693	665	718	701
21	699	521	---	---	---	---	665	634	689	663	715	687
22	656	464	---	---	---	---	665	627	685	665	706	688
23	685	655	---	---	---	---	661	627	683	631	704	689
24	711	685	---	---	---	---	678	643	680	603	706	681
25	717	706	---	---	---	---	691	678	679	629	702	689
26	713	704	---	---	---	---	709	685	691	625	712	692
27	706	694	---	---	---	---	713	680	689	584	714	698
28	703	685	---	---	---	---	709	671	699	686	717	711
29	725	703	---	---	---	---	701	667	701	687	719	698
30	729	703	---	---	661	654	699	669	702	664	703	530
31	---	---	713	706	---	---	699	661	703	683	---	---
MONTH	744	258	---	---	---	---	---	---	708	584	731	530

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	17.0	15.5	12.5	7.0	4.5	---	---	5.5	2.0	12.5	10.0
2	22.0	16.5	17.5	14.0	6.5	3.0	---	---	6.5	3.5	12.0	4.0
3	18.5	17.5	14.0	10.0	5.5	3.0	---	---	6.0	1.0	9.0	2.5
4	---	---	10.5	7.0	6.0	2.5	---	---	1.0	0.0	6.5	4.5
5	---	---	10.5	6.5	7.5	5.5	---	---	0.5	0.0	4.5	1.5
6	---	---	9.0	6.0	9.5	7.5	---	---	2.5	0.5	7.0	1.5
7	---	---	7.0	3.5	11.5	9.0	---	---	3.0	0.0	9.0	4.5
8	---	---	7.0	3.0	11.0	10.5	---	---	2.0	0.0	7.5	3.5
9	---	---	6.0	5.5	12.0	10.5	---	---	4.0	0.5	6.5	2.0
10	---	---	9.0	6.0	15.0	11.5	---	---	3.5	0.0	9.5	2.0
11	---	---	10.0	6.0	13.5	9.5	7.5	5.5	6.5	2.5	12.0	4.5
12	---	---	10.0	7.5	---	---	6.5	4.5	7.5	3.5	14.0	9.5
13	15.0	12.0	12.0	9.0	---	---	7.5	4.0	6.5	4.0	13.0	10.5
14	16.0	12.5	13.5	9.0	---	---	5.0	0.5	7.5	3.0	10.5	5.5
15	16.0	11.5	15.5	12.0	---	---	---	---	3.5	1.5	8.5	5.5
16	16.5	14.5	13.5	11.0	---	---	---	---	7.5	1.5	---	---
17	17.0	13.0	14.0	10.5	---	---	---	---	8.0	2.5	---	---
18	17.5	14.0	14.0	11.0	---	---	---	---	6.0	3.5	---	---
19	17.5	13.0	13.5	7.5	---	---	---	---	3.5	0.0	---	---
20	18.0	13.0	7.5	6.5	---	---	---	---	4.5	0.0	---	---
21	17.0	14.0	7.0	4.5	---	---	---	---	7.0	2.5	---	---
22	16.0	15.0	6.0	2.5	---	---	---	---	6.5	2.5	---	---
23	15.5	14.5	4.5	2.0	---	---	---	---	5.0	2.0	---	---
24	15.5	14.5	6.0	4.0	---	---	---	---	6.5	5.0	---	---
25	15.5	14.0	7.0	4.0	---	---	3.0	1.0	8.5	4.5	---	---
26	16.5	13.5	6.5	5.0	---	---	5.5	0.5	7.5	5.0	---	---
27	17.0	12.5	7.0	6.0	---	---	2.5	1.0	8.5	3.5	---	---
28	16.5	12.5	7.0	6.5	---	---	4.5	1.0	10.5	5.5	11.5	7.0
29	16.0	12.0	7.0	6.0	---	---	4.0	0.0	14.0	7.5	7.0	5.0
30	16.0	12.0	6.5	5.5	---	---	3.0	0.0	---	---	10.5	4.0
31	16.0	13.0	---	---	---	---	2.5	0.0	---	---	12.0	4.0
MONTH	---	---	17.5	2.0	---	---	---	---	14.0	0.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	5.5	18.0	12.5	19.0	10.0	24.0	15.0	21.5	18.5	23.0	17.5
2	7.0	4.5	20.0	13.0	21.5	12.5	20.5	17.0	21.5	17.5	21.5	17.0
3	10.5	4.0	18.0	11.5	23.0	14.5	20.5	17.0	21.5	19.0	19.0	16.0
4	11.5	6.0	14.0	11.5	23.5	16.0	18.0	15.0	22.5	17.5	19.5	15.0
5	13.5	5.0	18.5	9.0	23.0	14.0	21.5	14.5	23.0	15.0	20.5	15.0
6	15.5	7.5	20.0	12.0	19.0	15.5	20.0	13.5	18.5	15.0	20.5	14.0
7	10.5	1.5	18.5	13.5	22.5	13.5	20.0	14.0	21.5	17.5	21.5	15.0
8	7.0	1.0	16.0	13.5	21.0	14.0	21.5	15.0	18.5	16.0	19.0	17.0
9	12.0	3.0	14.0	11.0	22.0	14.5	21.5	16.5	19.5	15.0	21.5	16.0
10	13.0	6.0	17.0	8.5	20.0	13.5	22.0	17.5	21.0	13.5	20.0	14.0
11	14.5	9.5	19.5	9.5	20.0	11.0	25.0	17.5	21.5	14.5	21.0	16.0
12	15.0	9.5	20.0	10.5	20.0	12.5	24.5	18.5	22.0	17.0	19.5	18.5
13	20.5	13.5	15.0	12.0	19.5	16.5	21.5	18.5	24.0	16.5	24.0	17.5
14	15.0	10.5	19.0	13.0	24.5	16.5	---	---	24.0	17.5	21.5	18.0
15	16.0	12.5	16.5	13.5	21.0	18.0	---	---	24.0	19.5	20.0	15.0
16	16.0	12.0	16.5	12.5	22.5	15.0	---	---	23.5	16.5	19.5	15.0
17	18.0	9.0	18.5	11.5	21.5	14.5	---	---	25.0	19.0	23.0	17.0
18	19.0	9.5	21.5	12.0	23.0	14.5	24.5	20.0	25.5	21.0	20.5	18.0
19	14.5	11.5	22.0	13.0	19.5	16.0	25.0	19.0	23.0	19.5	21.0	16.5
20	13.5	10.0	19.0	13.5	16.0	13.0	25.5	19.0	23.5	17.5	20.5	15.0
21	10.0	7.5	23.0	13.0	---	---	26.0	20.0	24.5	17.5	20.0	14.5
22	14.5	9.5	22.0	14.0	---	---	25.5	20.0	22.0	18.5	19.5	14.5
23	16.0	10.0	23.5	14.0	---	---	26.5	19.5	23.0	18.5	15.5	13.5
24	13.0	9.0	23.0	13.5	---	---	23.0	19.5	23.0	18.5	17.5	15.5
25	15.0	7.0	23.5	14.0	---	---	24.0	18.5	23.0	18.0	19.5	16.5
26	16.5	7.0	22.5	13.5	---	---	22.0	17.0	23.5	18.5	19.0	17.0
27	17.0	8.0	21.5	13.5	---	---	22.0	18.0	21.0	18.0	18.0	16.0
28	17.5	8.5	21.5	13.0	---	---	22.0	17.5	23.0	16.0	18.0	14.5
29	14.5	10.5	19.5	14.0	---	---	21.5	16.0	23.0	16.0	17.5	16.0
30	18.5	11.0	16.5	15.0	19.0	17.0	22.5	16.0	23.0	16.5	16.0	12.0
31	---	---	15.0	11.0	---	---	23.5	17.0	23.0	16.5	---	---
MONTH	20.5	1.0	23.5	8.5	---	---	26.5	13.5	25.5	13.5	24.0	12.0

03270000 MAD RIVER NEAR DAYTON, OHIO

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec.7, R.8, T.2, Greene County, at gaging station on left bank in retarding basin 300 ft upstream from Huffman Dam, 2.3 miles downstream from Mud Run, and 6.2 miles northeast of Dayton. Continuous water-quality recorder located 900 ft downstream from gaging station.

DRAINAGE AREA.--635 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1948, water years 1962-63 (partial-record station), July 1966 to September 1972.
Water temperatures: October 1947 to September 1948, June 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,090 micromhos Feb. 12; minimum, 266 micromhos Apr. 7.
pH: Maximum, 9.1 Nov. 7; minimum 5.7 Jan. 28.
Dissolved oxygen: Maximum, 15.0 mg/l Nov. 8, Jan. 31, Feb. 5, 7, 8, 10; minimum, 3.7 mg/l Aug. 19.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT.								
06...	1140	220	344	0	80	28	--	.14
13...	1140	241	340	0	80	26	.3	.11
20...	1115	302	356	0	80	28	--	.080
27...	1105	285	352	0	78	28	--	.10
NOV.								
10...	1135	257	348	0	87	26	--	.090
DEC.								
15...	1240	1960	214	0	57	18	--	.11
JAN.								
19...	1110	500	344	0	87	26	--	.060
FEB.								
16...	1125	1220	196	0	44	21	--	.080
MAR.								
15...	1145	608	324	0	73	26	--	.070
APR.								
19...	1125	1050	326	0	76	26	--	.090
MAY								
17...	1030	1620	294	0	62	16	--	.040
JUNE								
21...	1115	432	340	0	78	30	--	.11
JULY								
05...	1140	428	308	0	69	28	--	.10
12...	1100	364	330	0	74	24	--	.19
19...	1020	384	336	0	75	30	--	.030
26...	1055	340	316	0	70	30	--	.040
AUG.								
02...	1025	278	332	0	78	36	--	.050
09...	1115	368	282	0	82	32	--	.070
16...	1120	264	322	0	78	31	.3	.090
23...	0820	316	320	0	77	31	--	.080
30...	1015	278	340	0	77	29	--	.050
SEP.								
06...	1015	235	338	0	76	32	--	.070
13...	1015	468	208	0	50	24	--	.10
20...	1105	260	326	0	73	36	--	.050
27...	1020	564	286	0	59	29	--	.080

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1968-69, 1970-72): Maximum, 1,210 micromhos Jan. 9, 1969; minimum, 165 micromhos June 26, 1971.
pH (1971-72): Maximum, 9.1 Nov. 7, 1971; minimum, 5.7 Jan. 28, 1972.
Dissolved oxygen (1970-72): Maximum, 15.0 mg/l on many days during November 1970 to January 1971, November 1971, January and February 1972; minimum, 2.4 mg/l June 4, 5, 1971.
Water temperatures (1947-48, 1968-69, 1970-71): Maximum, 28.5°C June 20, 1971; minimum, freezing point on several days during January and February of 1948 and 1971.

REMARKS.--Samples for iron and manganese filtered clear when collected. Continuous water-quality recorder operated since June 1968. Maximum recorded pH of 9.5 occurred May 15, 1970. Minimum recorded pH of 4.4 occurred Apr. 8, 1971. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Maximum recorded water temperature of 29.5°C occurred on Aug. 18, 1972. Interruptions in the record were due to malfunctions of the instrument. Samples were collected weekly October, July to September, and monthly November to June. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.									
06...	.45	1.0	4.3	.04	.06	.76	2.3	434	370
13...	.36	3.5	15	.12	.15	.79	2.4	434	370
20...	.28	2.9	13	.14	.19	.54	1.6	442	380
27...	.30	2.0	9.0	.08	.11	.57	1.8	450	380
NOV.									
10...	.31	2.3	10	.20	.25	.64	2.0	458	380
DEC.									
15...	.38	3.4	15	.25	.32	.56	1.7	320	260
JAN.									
19...	.19	3.0	14	.23	.29	.44	1.3	452	400
FEB.									
16...	.26	2.3	10	.76	.98	.46	1.4	296	210
MAR.									
15...	.23	3.5	16	.84	1.1	.31	.96	439	360
APR.									
19...	.31	4.1	18	.56	.73	.29	.89	440	360
MAY									
17...	.12	4.2	18	.29	.38	.25	.77	398	330
JUNE									
21...	.36	2.2	9.7	.59	.76	.47	1.4	446	380
JULY									
05...	.35	2.4	11	.11	.14	.44	1.3	428	340
12...	.61	2.6	11	.82	1.1	.45	1.4	438	360
19...	.11	2.4	11	.37	.48	.52	1.6	456	370
26...	.14	3.0	14	.42	.55	.45	1.4	422	350
AUG.									
02...	.16	2.1	9.2	1.2	1.5	.56	1.7	459	370
09...	.23	2.3	10	.56	.73	.55	1.7	468	370
16...	.30	2.1	9.2	.50	.64	.63	1.9	440	360
23...	.26	2.4	10	.50	.64	.63	1.9	438	360
30...	.16	2.2	9.6	.30	.38	.61	1.8	464	380
SEP.									
06...	.23	2.4	10	.36	.46	.66	2.0	444	390
13...	.34	1.6	7.0	.43	.56	.39	1.2	288	230
20...	.17	2.1	9.2	.53	.69	.52	1.6	437	360
27...	.26	2.4	11	.66	.85	.37	1.1	380	320

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.								
06...	88	729	7.9	17.5	10	2	7.7	80
13...	91	730	7.7	13.5	10	2	8.9	85
20...	88	741	7.7	16.5	15	2	7.9	81
27...	91	737	7.7	15.5	10	2	7.6	76
NOV.								
10...	94	743	7.8	6.5	8	2	11.4	93
DEC.								
15...	84	496	7.5	8.5	130	2	10.8	92
JAN.								
19...	120	723	7.9	4.5	6	2	11.6	89
FEB.								
16...	50	457	7.8	1.0	55	2	11.9	84
MAR.								
15...	94	696	8.1	7.0	8	4	13.0	110
APR.								
19...	92	687	8.0	15.0	25	2	8.7	85
MAY								
17...	88	625	7.9	14.5	30	2	9.1	88
JUNE								
21...	100	714	8.0	19.0	7	2	7.8	83
JULY								
05...	87	647	8.1	18.5	40	2	7.7	82
12...	89	701	8.0	22.0	15	2	7.3	83
19...	94	707	8.0	23.0	30	2	6.9	79
26...	90	672	8.0	21.5	25	4	6.9	78
AUG.								
02...	98	708	8.1	21.5	15	2	6.5	72
09...	140	722	7.4	18.0	15	4	9.1	96
16...	96	700	8.0	22.0	15	2	6.8	77
23...	98	702	7.7	22.0	20	2	5.1	58
30...	100	711	7.9	20.0	300	4	6.2	67
SEP.								
06...	110	710	7.7	18.0	20	4	7.0	74
13...	60	485	7.5	21.0	50	4	6.3	72
20...	92	700	7.9	19.0	20	4	6.8	72
27...	85	625	7.6	19.5	35	2	7.8	84

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	330	22	64	4	12	60	4	.01	1
14...	230	66	--	--	--	--	--	--	--
AUG.									
16...	590	29	0	6	10	10	5	.00	0

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	762	717	771	720	717	681	678	489	771	753	816	756
2	795	714	768	714	759	714	702	558	773	758	774	588
3	768	726	732	663	753	729	762	615	818	746	648	588
4	765	726	738	672	765	726	747	678	799	742	720	654
5	765	726	729	690	756	723	744	603	807	747	753	717
6	771	732	765	699	765	639	822	609	818	770	765	738
7	768	726	750	675	639	570	792	624	952	766	813	759
8	771	741	726	642	681	549	765	546	934	843	783	747
9	780	702	744	666	756	681	807	705	846	804	759	744
10	738	669	744	696	798	741	804	579	846	789	771	744
11	726	666	741	711	789	768	708	591	912	807	774	756
12	753	711	744	708	792	765	721	691	1090	813	777	768
13	759	720	753	720	801	777	739	721	1070	936	795	759
14	753	711	747	708	789	519	749	719	987	717	765	747
15	735	696	744	708	603	474	759	732	729	558	753	729
16	714	573	744	708	744	501	780	741	558	468	780	678
17	648	486	750	717	795	711	784	718	678	555	696	672
18	711	639	756	717	828	771	756	735	720	681	714	678
19	750	711	756	717	807	762	770	725	723	705	744	714
20	759	729	726	672	816	726	744	717	762	714	777	744
21	762	729	735	690	816	768	760	718	774	747	---	768
22	777	720	756	708	783	765	746	722	777	765	---	---
23	756	711	756	714	792	768	741	723	780	762	643	586
24	753	696	765	723	807	780	724	709	789	756	693	630
25	711	660	765	729	798	780	735	717	789	765	687	678
26	747	684	756	729	798	780	748	721	777	762	680	671
27	765	729	765	726	795	777	764	731	771	753	694	677
28	765	738	744	705	825	765	762	741	774	756	709	694
29	759	729	735	705	789	741	879	744	777	762	711	690
30	768	729	723	669	795	303	847	769	---	---	722	710
31	762	720	---	---	495	342	776	752	---	---	722	710
MONTH	795	486	771	642	828	303	879	489	1090	468	816	586

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	725	716	716	704	711	675	697	583	729	702	750	723
2	---	---	716	707	723	711	724	691	738	702	751	718
3	---	---	719	704	733	718	718	706	720	603	737	593
4	---	---	719	707	721	706	712	625	681	576	711	696
5	---	---	722	710	721	706	700	601	717	636	739	694
6	714	702	720	708	739	712	730	700	726	702	746	719
7	713	266	717	699	722	710	736	715	735	705	752	719
8	515	278	714	597	731	719	745	721	735	708	753	723
9	625	515	597	414	758	722	736	715	726	678	778	724
10	658	589	604	424	737	650	721	694	717	648	755	728
11	681	600	676	607	717	675	721	685	723	699	756	729
12	707	539	703	679	723	711	715	694	753	708	751	394
13	617	494	706	631	729	448	730	715	732	699	617	392
14	637	460	673	577	673	547	739	718	729	696	692	608
15	682	637	623	326	715	673	733	580	729	708	707	635
16	682	505	587	440	712	697	688	520	729	699	749	707
17	602	494	656	587	727	709	637	568	735	711	752	722
18	683	602	684	656	721	709	705	589	729	702	806	707
19	704	683	702	684	724	715	729	693	720	612	707	647
20	701	512	726	702	730	721	726	681	714	684	737	659
21	624	501	711	705	736	721	732	711	702	633	761	725
22	597	489	721	706	736	721	735	711	729	693	752	725
23	618	507	721	709	739	721	726	705	721	604	746	701
24	678	618	724	715	727	703	738	672	604	407	731	557
25	693	675	730	715	730	706	687	633	630	471	686	623
26	709	693	728	713	733	721	714	603	721	481	680	587
27	715	706	725	710	730	721	735	699	632	425	680	596
28	724	709	722	707	736	721	735	705	701	524	692	590
29	721	709	719	704	727	529	741	708	753	699	710	617
30	730	709	714	558	583	343	723	702	754	718	677	515
31	---	---	678	618	---	---	726	702	752	722	---	---
MONTH	730	266	730	326	758	343	745	520	754	407	806	392
YEAR	1090	266										

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.2	7.6	8.2	7.5	8.0	7.5	---	---	7.9	7.5	8.1	8.0
2	8.2	7.5	8.2	7.1	8.1	7.6	---	---	8.1	7.6	8.1	7.9
3	8.2	7.5	8.6	7.8	7.9	7.6	---	---	8.1	7.8	8.2	8.1
4	7.9	7.4	9.0	8.3	7.9	7.5	---	---	---	8.0	8.3	8.1
5	7.8	7.3	8.8	8.3	7.6	7.5	---	---	8.3	7.9	8.3	8.0
6	7.8	7.2	8.4	8.1	7.6	7.5	---	---	7.9	7.6	8.0	6.9
7	8.0	7.2	9.1	8.3	7.7	7.5	---	---	---	7.8	7.8	7.0
8	8.1	7.4	8.7	8.1	7.5	7.5	---	---	8.1	8.0	8.3	7.6
9	8.3	7.7	8.1	7.6	7.7	7.5	---	---	---	---	8.2	7.5
10	---	---	7.9	7.1	7.9	7.6	---	---	---	---	8.1	7.5
11	---	---	7.7	7.0	8.2	7.7	8.1	7.6	---	---	8.3	7.3
12	---	---	7.6	7.0	8.0	7.7	7.9	7.5	---	---	8.5	7.5
13	8.0	7.1	7.8	6.9	8.0	7.6	7.8	7.4	---	---	8.5	8.0
14	7.5	7.0	8.0	7.2	7.7	7.3	8.0	7.6	---	---	8.3	7.9
15	7.2	6.7	7.9	7.0	7.7	7.2	7.9	7.6	---	---	8.0	7.4
16	7.1	6.6	8.1	7.2	8.0	7.7	8.2	7.6	---	---	8.1	7.3
17	7.0	6.6	8.2	7.5	8.1	8.0	7.6	6.8	---	---	8.0	7.7
18	7.3	6.8	8.0	7.5	8.2	7.7	7.1	6.7	---	---	7.9	7.5
19	7.4	7.0	8.0	7.5	7.7	7.5	7.6	7.1	---	---	7.9	7.3
20	7.5	6.9	8.0	7.8	7.6	7.5	7.7	7.4	---	---	8.3	7.3
21	7.3	6.9	8.2	7.1	8.1	7.6	7.9	7.5	---	---	7.9	7.2
22	7.5	7.2	7.6	6.8	8.1	7.8	7.9	7.6	---	---	7.9	7.7
23	7.5	7.3	7.0	6.6	7.8	7.6	7.9	7.6	---	---	8.0	7.2
24	7.8	7.4	7.4	6.7	7.8	7.5	7.9	7.6	---	---	7.4	6.9
25	8.0	7.8	8.1	7.4	8.0	7.6	8.2	7.6	---	---	7.3	6.8
26	8.1	7.7	7.9	7.6	7.8	7.7	8.0	7.6	---	---	7.5	6.9
27	8.2	7.7	7.7	7.5	8.0	7.8	7.6	6.0	---	---	7.4	6.9
28	8.2	7.4	7.8	7.5	8.3	7.8	7.6	5.7	---	---	7.6	7.0
29	8.1	7.5	7.7	7.5	8.1	7.9	8.2	7.6	---	---	7.5	7.2
30	8.0	7.4	7.8	7.5	---	7.7	8.1	7.6	---	---	7.9	7.1
31	7.6	7.2	---	---	---	7.8	7.7	6.8	---	---	7.8	7.1
MONTH	8.3	6.6	9.1	6.6	8.3	7.2	---	---	---	---	8.5	6.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.1	8.2	7.9	8.4	8.0	8.1	7.6	8.2	7.9	8.1	7.7
2	7.7	7.3	8.3	8.0	8.4	7.9	8.2	7.6	8.2	7.8	8.2	7.9
3	7.7	7.1	8.3	8.0	8.4	7.9	8.3	8.0	8.0	7.6	8.1	7.9
4	8.0	7.1	8.4	8.0	8.4	7.9	8.3	8.0	8.1	7.6	8.1	7.8
5	8.1	7.2	8.4	8.0	8.5	7.9	8.5	8.0	8.3	7.8	8.2	7.8
6	8.4	7.2	8.5	8.0	8.2	7.8	8.5	8.0	8.2	7.7	8.3	7.8
7	8.2	7.9	8.5	8.0	8.4	7.8	8.5	8.0	8.1	7.9	8.3	7.8
8	8.4	7.9	8.2	7.9	8.4	7.8	8.4	8.1	8.4	8.0	8.1	7.8
9	8.4	8.2	7.9	7.8	8.4	7.9	8.5	8.1	8.4	7.9	8.3	7.9
10	8.4	7.4	8.0	7.8	8.5	7.9	8.3	8.0	8.5	7.8	8.5	7.9
11	8.5	8.3	8.1	7.9	8.6	7.9	8.3	7.7	8.5	7.9	8.4	7.9
12	8.5	8.0	8.1	7.9	8.5	7.9	8.4	7.8	8.4	7.8	7.9	7.4
13	8.4	8.1	8.1	7.9	8.0	7.8	8.3	7.9	8.5	7.8	7.9	7.3
14	8.4	7.9	8.0	7.9	8.1	7.6	8.5	8.0	8.4	7.8	7.8	7.3
15	8.0	8.0	8.0	7.7	8.0	7.7	8.3	8.0	8.4	7.8	8.1	7.7
16	8.0	8.0	7.9	7.8	8.2	7.8	8.1	7.8	8.6	7.9	8.1	7.7
17	8.1	7.8	8.0	7.8	8.3	7.8	8.1	7.6	8.4	7.9	8.0	7.6
18	8.0	7.9	8.0	7.7	8.4	7.9	7.9	7.4	8.4	7.8	8.0	7.6
19	8.0	7.9	8.0	7.7	8.4	7.8	7.9	7.4	8.4	7.9	7.9	7.6
20	8.0	7.9	8.0	7.8	8.3	7.8	7.9	7.5	8.5	7.9	8.2	7.7
21	8.0	8.0	8.1	7.7	8.3	7.9	8.0	7.6	8.4	7.8	8.3	7.9
22	8.0	7.9	8.1	7.7	8.4	8.2	8.0	7.6	8.2	7.9	8.5	8.0
23	8.0	7.9	8.1	7.7	8.6	8.2	8.2	7.5	8.1	7.6	8.5	8.2
24	8.1	8.0	8.2	7.7	8.4	8.2	8.2	7.8	8.0	7.5	8.3	8.0
25	8.1	8.0	8.2	7.8	8.5	8.1	8.1	7.6	7.8	7.4	8.1	7.8
26	8.1	7.9	8.3	7.8	8.6	8.0	8.2	7.6	7.9	7.3	7.9	7.5
27	8.1	7.9	8.4	7.9	8.5	8.0	8.2	7.9	7.7	7.6	7.6	7.1
28	8.1	7.9	8.5	7.9	8.4	7.9	8.3	7.9	8.0	7.4	7.4	6.9
29	8.2	8.0	8.4	7.9	8.4	7.9	8.3	8.0	8.0	7.4	7.4	6.8
30	8.2	8.0	8.0	7.8	8.0	7.7	8.4	8.0	8.0	7.5	8.3	7.5
31	---	---	8.1	7.8	---	---	8.3	7.9	8.1	7.6	---	---
MONTH	8.5	7.1	8.5	7.7	8.6	7.6	8.5	7.4	8.6	7.3	8.5	6.8
YEAR	9.1	5.7										

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.6	6.0	12.8	7.3	13.0	9.2	9.3	8.5	14.2	12.1	10.3	8.2
2	11.6	6.4	11.9	7.1	13.7	9.8	8.8	8.4	14.0	11.6	10.2	8.1
3	12.2	6.6	11.6	6.8	13.7	9.5	9.7	8.5	12.5	10.7	11.5	10.4
4	12.0	6.4	13.6	7.8	14.4	9.5	9.7	8.8	14.4	11.0	12.0	10.8
5	12.3	6.8	13.8	8.6	12.1	9.5	10.0	9.1	15.0	12.6	12.4	11.0
6	12.0	6.7	11.2	8.6	10.0	8.4	10.9	9.9	14.1	12.1	12.9	11.5
7	12.8	7.1	14.7	9.4	9.2	8.2	10.3	9.4	15.0	12.2	12.1	10.5
8	12.5	7.6	15.0	9.9	9.3	8.9	9.8	9.1	15.0	12.3	12.3	10.6
9	9.7	7.5	12.3	10.1	9.2	8.9	10.5	9.4	14.7	11.9	13.7	11.6
10	9.4	7.7	13.0	9.1	9.0	8.0	10.3	9.2	15.0	12.0	13.9	11.7
11	12.0	8.1	13.2	7.8	9.9	8.1	11.3	9.3	14.6	11.1	13.5	10.6
12	12.1	8.0	13.2	7.2	11.0	8.8	11.5	10.7	14.4	10.4	12.5	9.8
13	12.4	7.9	13.3	7.0	11.5	9.6	11.0	10.4	11.9	9.9	11.9	9.2
14	13.5	6.1	13.6	7.5	10.5	9.7	12.3	10.8	13.7	9.7	10.7	9.1
15	13.8	5.9	13.0	6.8	10.3	9.0	13.4	11.9	11.3	10.1	12.8	10.5
16	11.0	5.9	12.9	6.8	10.3	9.2	13.5	7.7	11.5	10.8	11.2	10.0
17	9.9	5.9	13.2	6.9	10.5	9.7	12.9	11.9	11.8	10.7	10.7	10.0
18	11.5	6.5	11.7	7.0	12.2	10.3	12.2	11.3	11.5	10.2	12.4	10.5
19	12.1	6.7	9.7	6.8	12.7	11.5	12.0	10.8	12.7	10.5	12.9	10.7
20	11.1	6.4	9.8	8.1	11.7	10.3	11.3	10.1	13.6	11.2	12.8	10.4
21	10.2	6.1	12.9	8.7	11.7	9.8	11.4	9.9	13.0	10.9	12.2	9.4
22	8.6	6.0	13.8	10.3	10.7	9.8	10.7	9.5	13.7	10.5	10.9	9.2
23	8.2	5.8	14.4	11.5	10.8	9.8	11.5	9.6	12.0	9.4	11.4	10.9
24	7.8	5.6	13.7	11.0	10.3	9.2	11.1	9.8	11.4	9.0	12.0	10.8
25	9.1	5.8	14.7	9.7	10.4	9.0	13.0	10.1	12.7	9.5	12.0	10.6
26	10.6	7.1	13.9	9.5	9.2	8.5	13.9	11.4	12.3	9.4	12.1	10.0
27	10.9	6.5	11.5	9.5	9.1	8.1	12.6	11.3	13.6	10.1	11.6	9.6
28	11.1	6.4	11.8	8.9	9.7	8.0	14.0	11.3	12.7	10.0	12.1	9.2
29	11.2	6.5	10.3	8.6	10.3	8.7	14.1	12.1	12.9	9.0	10.2	9.0
30	11.5	6.5	10.7	8.3	9.4	8.4	14.2	12.1	---	---	12.6	9.4
31	11.8	6.4	---	---	10.5	8.8	15.0	12.0	---	---	12.6	9.5
MONTH	13.8	5.6	15.0	6.8	14.4	8.0	15.0	7.7	15.0	9.0	13.9	8.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.1	9.9	7.5	11.8	8.1	8.1	6.3	8.9	5.5	7.4	4.8
2	12.6	9.6	11.1	7.0	11.8	7.6	8.1	6.0	8.8	5.2	8.2	5.0
3	13.2	9.6	9.9	7.0	12.0	6.7	8.6	5.9	7.5	4.9	6.8	5.2
4	12.8	9.0	12.2	7.3	11.8	6.4	7.8	6.0	8.1	4.7	8.7	5.8
5	12.6	8.7	12.9	8.2	11.9	6.4	9.2	6.6	8.7	5.2	9.6	5.9
6	12.6	7.9	12.4	7.9	10.1	6.2	9.1	6.7	8.1	5.3	9.9	5.8
7	10.0	7.9	13.6	7.4	11.9	6.0	9.7	6.5	8.6	5.5	10.1	5.4
8	12.1	9.1	8.4	6.8	11.8	6.1	9.1	6.4	8.9	5.6	8.7	5.1
9	12.2	8.1	9.4	7.5	11.7	6.2	9.3	6.1	9.0	5.2	10.0	5.0
10	9.8	7.1	9.5	9.0	11.9	6.2	8.8	5.6	10.5	5.4	11.2	5.3
11	7.8	6.8	9.7	8.5	13.2	6.5	9.5	5.6	11.1	5.3	10.8	5.4
12	9.5	7.8	9.5	8.1	12.2	6.7	9.3	5.5	10.4	4.9	6.7	5.2
13	8.4	7.4	8.4	7.8	8.1	6.0	8.9	5.2	11.4	4.8	6.6	5.3
14	9.0	6.8	8.2	7.6	10.1	5.5	9.2	5.1	11.1	4.6	6.6	5.2
15	8.2	8.0	7.9	6.6	7.9	5.6	7.8	5.0	10.0	4.5	7.7	5.4
16	8.6	8.0	8.7	6.0	9.7	5.9	6.9	5.4	11.0	4.5	7.9	5.6
17	9.0	8.5	8.5	8.1	10.4	6.0	7.5	5.7	10.2	4.3	8.5	5.5
18	8.8	7.8	8.5	7.7	10.7	6.3	6.8	5.1	10.4	3.9	7.6	5.2
19	7.8	7.5	8.4	7.4	10.6	6.0	7.2	4.9	8.1	3.7	8.0	5.4
20	8.5	7.4	8.4	7.2	9.4	5.6	7.0	4.9	10.1	4.3	9.1	5.4
21	9.1	8.4	9.1	7.4	8.9	5.6	7.6	4.7	10.2	4.2	9.3	5.7
22	9.5	8.7	9.1	7.2	9.3	6.5	7.6	4.5	7.9	4.7	10.0	5.8
23	8.6	8.3	9.4	6.9	10.2	7.2	8.0	4.4	6.9	4.6	9.2	6.0
24	8.7	8.2	9.7	6.8	9.9	7.5	7.7	4.5	7.1	4.4	7.1	6.2
25	10.3	8.4	10.2	6.7	11.3	7.3	6.6	4.8	6.5	4.4	8.1	6.0
26	10.3	8.8	10.7	6.7	11.3	6.8	7.7	4.8	6.5	4.4	6.5	6.0
27	9.5	8.6	11.3	6.7	11.3	6.2	7.6	4.9	5.4	4.7	6.8	5.8
28	9.4	8.2	12.1	7.0	10.2	5.7	7.9	4.9	7.1	5.3	6.9	6.2
29	9.4	8.0	11.0	6.9	9.0	5.6	8.8	4.9	7.4	5.4	6.8	6.3
30	9.8	7.8	8.3	6.5	7.0	6.0	9.5	5.6	7.4	5.0	8.1	6.6
31	---	---	9.6	6.3	---	---	9.6	5.6	7.5	4.9	---	---
MONTH	13.2	6.8	13.6	6.0	13.2	5.5	9.7	4.4	11.4	3.7	11.2	4.8
YEAR	15.0	3.7										

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03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	4.5	3.0	---	---	4.5	1.5	11.0	9.5
2	---	---	---	---	5.0	2.0	---	---	6.5	3.5	12.0	4.5
3	---	---	---	---	3.5	2.0	---	---	6.0	3.5	5.0	2.5
4	---	---	---	---	4.0	2.0	---	---	3.5	0.0	5.5	4.0
5	---	---	---	---	5.5	4.0	---	---	1.5	0.0	7.0	3.5
6	---	---	---	---	8.0	5.5	---	---	2.0	1.0	8.0	3.5
7	---	---	---	---	9.5	8.0	---	---	2.0	0.0	9.0	5.0
8	---	---	---	---	9.0	8.5	---	---	4.5	0.0	6.5	4.0
9	---	---	---	---	10.0	9.0	---	---	3.0	0.0	7.0	5.0
10	---	---	9.0	7.0	13.5	10.0	---	---	2.5	0.0	9.0	3.0
11	---	---	10.5	7.5	13.0	9.5	8.0	6.0	6.0	0.5	12.0	5.5
12	---	---	11.0	9.0	9.5	7.0	6.5	5.0	8.0	3.0	14.5	10.0
13	---	---	12.5	10.5	8.0	6.5	7.5	4.5	6.0	3.5	14.5	12.0
14	---	---	14.0	10.5	7.0	5.0	4.5	1.0	6.0	2.0	11.5	7.5
15	---	---	15.5	13.0	11.5	6.5	0.5	0.0	5.0	2.5	7.5	6.5
16	---	---	14.5	13.0	12.0	10.5	0.0	0.0	4.0	1.5	8.5	7.0
17	---	---	15.0	13.0	10.0	5.5	0.0	0.0	8.0	3.5	7.5	6.0
18	---	---	15.0	13.5	5.5	3.0	4.0	0.0	8.0	5.0	8.0	5.0
19	---	---	15.0	10.5	4.5	2.5	6.5	4.0	5.0	1.0	9.5	4.5
20	---	---	10.5	9.0	7.5	5.0	8.5	5.5	4.0	0.0	11.5	6.5
21	---	---	9.0	7.5	7.0	5.5	8.0	7.0	4.5	0.0	---	6.5
22	---	---	7.5	6.0	6.0	4.5	10.5	7.0	6.0	2.0	10.0	---
23	---	---	6.0	5.5	5.5	3.5	9.5	8.0	5.0	0.0	---	---
24	---	---	7.0	4.5	8.0	5.5	10.0	7.5	5.5	2.5	---	---
25	---	---	5.5	3.5	8.0	5.5	9.5	4.5	7.5	3.5	---	---
26	---	---	5.5	4.5	10.0	8.0	5.0	3.0	6.5	5.0	---	---
27	---	---	5.5	5.0	12.5	9.5	5.0	2.0	8.0	3.5	---	---
28	---	---	6.0	5.5	12.5	6.5	5.0	2.0	10.0	4.0	---	---
29	---	---	6.0	5.0	6.5	4.5	3.5	0.5	13.0	6.5	---	---
30	---	---	6.0	4.5	---	5.5	3.0	1.0	---	---	---	---
31	---	---	---	---	---	7.0	2.0	0.5	---	---	---	---
MONTH	---	---	---	---	13.5	2.0	---	---	13.0	0.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.5	15.0	17.5	12.5	23.0	17.5	24.0	21.0	25.0	21.5
2	---	---	20.0	16.5	21.0	14.5	22.0	20.0	24.5	21.0	24.5	21.5
3	---	---	18.5	15.5	23.5	18.0	23.0	19.5	24.5	21.5	23.0	19.5
4	---	---	16.5	15.5	25.5	19.5	21.0	18.5	24.5	21.0	21.5	18.0
5	---	---	17.0	13.0	25.0	19.0	21.5	16.5	24.5	18.0	24.5	17.5
6	---	---	21.0	15.0	22.5	20.0	21.0	16.5	22.0	18.5	24.0	17.0
7	---	---	21.5	17.5	24.0	18.5	21.0	16.5	22.0	20.0	23.0	17.5
8	---	---	20.5	17.5	22.5	16.0	21.0	17.5	21.0	18.5	22.5	21.0
9	---	---	17.0	13.5	21.5	17.5	22.5	18.0	22.0	18.5	24.5	19.0
10	---	---	15.5	11.5	21.0	16.5	23.0	20.0	23.0	16.5	22.5	17.0
11	---	---	18.5	14.0	20.0	14.0	26.5	20.5	22.5	17.0	23.5	18.5
12	---	---	18.0	13.5	20.0	14.5	27.0	21.5	24.5	19.5	23.5	20.5
13	---	---	17.0	14.5	19.5	18.0	27.0	23.0	26.5	20.5	24.5	21.0
14	16.0	14.5	16.5	13.5	24.0	19.0	28.0	23.0	26.0	21.0	---	---
15	15.5	14.5	16.0	15.0	22.5	20.5	26.0	23.0	25.0	23.5	---	---
16	16.5	14.5	15.5	14.5	23.5	19.0	24.0	22.0	26.0	20.0	---	---
17	16.0	12.5	17.5	13.0	22.5	18.0	24.5	21.0	27.5	22.5	---	---
18	17.5	13.5	19.5	14.5	23.0	17.5	26.5	21.5	29.5	24.5	---	---
19	16.5	15.0	20.5	16.0	25.0	19.0	27.5	20.0	28.0	24.0	---	---
20	15.0	12.5	19.5	16.5	23.5	21.5	26.5	22.0	27.0	22.0	---	---
21	12.0	9.5	20.0	15.0	22.0	18.5	28.5	23.0	27.0	21.5	---	---
22	12.5	10.5	21.0	16.0	18.5	15.0	28.5	24.0	25.0	22.5	---	---
23	14.0	12.0	23.0	17.0	15.0	12.5	28.5	24.0	26.0	22.5	---	---
24	12.5	11.5	23.0	17.0	13.5	12.0	26.5	23.5	25.0	22.5	---	---
25	13.0	9.5	23.0	18.0	16.5	12.5	26.5	22.5	26.0	22.5	---	---
26	14.5	10.0	23.5	17.5	20.5	14.5	24.5	20.5	25.0	22.5	---	---
27	16.0	11.0	22.0	17.5	23.0	17.0	25.5	21.5	24.0	22.0	---	---
28	15.5	12.0	22.0	16.5	21.5	19.0	24.0	21.0	23.0	19.5	---	---
29	16.5	13.5	21.0	17.5	21.0	18.5	23.0	19.5	23.0	18.0	---	---
30	17.0	13.5	18.5	17.0	20.0	17.0	23.5	19.0	24.0	19.5	---	---
31	---	---	18.5	13.5	---	---	24.5	20.5	24.5	20.0	---	---
MONTH	---	---	23.5	11.5	25.5	12.0	28.5	16.5	29.5	16.5	---	---

03271350 GREAT MIAMI RIVER AT WEST CARROLLTON, OHIO

LOCATION.--Lat 39°40'28", long 84°15'42", Montgomery County, at bridge on Farmersville-West Carrollton Road, at West Carrollton.

DRAINAGE AREA.--2,647 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)
OCT.												
06...	1300	294	0	97	62	--	.14	.47	1.8	8.0	.26	.34
13...	1210	302	0	95	60	.7	.020	.06	3.1	14	.67	.86
20...	0915	294	0	87	56	--	.11	.38	2.4	11	.16	.21
27...	1305	308	0	91	56	--	.14	.45	2.6	12	.23	.30
NOV.												
10...	0845	328	0	100	56	--	.10	.34	2.9	13	.78	1.0
DEC.												
15...	0900	238	0	72	28	--	.080	.27	2.9	13	.36	.46
JAN.												
19...	1215	314	0	95	48	--	.080	.26	5.3	23	.78	1.0
FEB.												
16...	1225	264	0	67	43	.3	.070	.23	2.8	12	.62	.80
MAR.												
15...	1245	256	0	74	32	--	.070	.24	6.0	26	.66	.85
APR.												
19...	1250	226	0	63	26	--	.14	.47	6.0	26	.92	1.2
MAY												
17...	1100	206	0	51	16	.4	.16	.53	6.1	27	.2	.34
JUNE												
21...	1145	294	0	75	38	--	.080	.28	4.8	21	.81	1.0
JULY												
05...	1210	244	0	63	30	--	.14	.47	4.3	19	.67	.87
12...	1155	292	0	83	38	--	.10	.32	3.3	15	.90	1.2
19...	1050	276	0	72	40	--	.080	.26	3.2	14	.77	.99
26...	1120	302	0	80	50	--	.050	.16	2.4	11	.63	.81
AUG.												
02...	1055	308	0	91	58	--	.080	.26	1.8	8.1	1.1	1.4
09...	1205	290	0	93	60	--	.070	.24	2.0	8.6	.87	1.1
16...	1235	308	0	96	59	.6	.13	.42	2.0	8.9	.84	1.1
23...	0845	273	0	92	58	--	.11	.36	2.2	10	.84	1.1
30...	1045	244	0	88	86	--	.080	.26	2.1	9.4	.33	.43
SEP.												
06...	1045	318	0	87	64	--	.12	.41	3.0	14	.76	.98
13...	1055	260	0	69	42	--	.10	.35	.2	8.1	.72	.92
20...	1235	282	0	81	52	--	.11	.38	2.8	12	.82	1.1
27...	1050	216	0	59	32	--	.10	.33	3.4	15	.49	.63

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	410	42	4	21	28	90	8	.00	1
20...	400	--	--	14	--	70	--	--	--
FEB.									
16...	800	40	10	17	21	100	10	.01	3
MAY									
17...	2400	130	0	14	10	120	9	.00	2
JULY									
12...	740	--	--	12	--	90	--	--	0
19...	10	--	--	2	--	60	--	--	6
AUG.									
09...	290	--	--	21	--	60	--	--	0
16...	560	63	0	14	28	40	5	.00	0
SEP.									
13...	850	--	--	22	--	80	--	--	4
20...	510	--	--	25	--	70	--	--	--

03271350 GREAT MIAMI RIVER AT WEST CARROLLTON, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: April 1965 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples collected weekly October, July to September, and monthly November to June. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.												
06...	1.8	5.5	476	310	68	810	8.2	24.5	20	0	5.4	64
13...	1.8	5.5	492	320	72	830	7.4	19.5	20	4	7.5	81
20...	1.6	4.8	468	320	78	781	7.3	21.0	20	4	6.4	71
27...	1.6	5.0	482	320	67	816	7.5	21.0	20	4	6.5	72
NOV.												
10...	1.6	5.1	514	340	70	855	7.5	12.0	15	8	9.9	92
DEC.												
15...	.61	1.8	372	290	94	586	7.5	9.5	110	2	11.3	98
JAN.												
19...	.64	2.0	492	380	120	777	7.8	3.5	15	4	12.6	95
FEB.												
16...	.63	1.9	422	300	83	661	8.0	4.0	35	4	12.3	94
MAR.												
15...	.49	1.5	424	330	120	660	7.8	7.0	70	4	11.9	98
APR.												
19...	.49	1.5	348	270	84	551	7.9	15.0	120	2	9.7	95
MAY												
17...	.44	1.3	334	250	81	500	7.6	14.5	120	2	9.6	93
JUNE												
21...	.72	2.2	440	350	110	699	8.1	23.0	20	2	8.1	93
JULY												
05...	.65	2.0	378	280	80	571	8.0	20.5	140	4	7.4	81
12...	.79	2.4	420	350	110	691	8.2	26.0	25	4	8.4	100
19...	.93	2.8	400	310	84	659	8.0	27.5	30	2	7.0	88
26...	1.1	3.3	462	330	82	730	8.0	27.0	25	4	6.6	81
AUG.												
02...	1.8	5.7	502	340	87	783	8.0	25.5	20	2	5.1	61
09...	1.3	4.0	509	340	100	789	7.9	23.0	25	4	6.4	74
16...	1.2	3.8	497	340	87	802	8.1	27.0	20	4	4.7	58
23...	1.4	4.3	468	310	86	757	7.4	27.0	25	2	3.9	48
30...	1.3	4.1	514	320	120	802	7.1	25.0	25	2	4.5	54
SEP.												
06...	1.9	5.8	492	350	89	800	7.8	23.0	40	4	5.7	66
13...	.81	2.5	390	280	66	655	7.8	24.0	35	4	6.7	77
20...	1.2	3.6	453	320	88	730	7.6	24.0	25	4	6.0	70
27...	.65	2.0	332	250	73	540	7.8	20.0	100	2	9.0	98

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO

LOCATION.--Lat 39°36'39", long 84°17'28", Montgomery County, on Chautauqua Road bridge, about 2 miles south of Miamisburg and 2.5 miles downstream from gaging station at Miamisburg. Prior to October 1971, at site, 400 ft downstream "in O. H. Hutchings power plant".

DRAINAGE AREA.--2,715 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1962 -64 (partial-record station), March 1964 to September 1972. Water temperatures: March 1964 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,170 micromhos Feb. 9; minimum, 280 micromhos Apr. 8.
Dissolved oxygen: Maximum, 15.0 mg/l Feb. 9; minimum, 0.0 mg/l Oct. 1, 2.
Water temperatures: Maximum, 32.5°C July 22, 23; minimum, 1.0°C Jan. 16, 31.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
19...	1330	661	246	10	78	65	.4	2.9
28...	1350	--	--	--	--	--	--	--
29...	1300	573	292	12	94	67	.6	3.4
NOV.								
19...	1345	650	282	16	100	72	.8	2.4
23...	1040	470	298	0	92	59	.5	2.7
DEC.								
03...	1300	694	314	0	87	51	.6	2.2
16...	1027	10500	182	0	55	22	.4	4.0
JAN.								
11...	1500	5180	246	0	74	31	.3	4.4
21...	1315	1620	306	0	89	44	.5	4.1
FEB.								
09...	0655	860	326	0	94	75	.5	4.7
22...	1230	1490	284	0	85	43	.4	4.5
MAR.								
17...	1350	4360	241	0	70	32	.2	6.7
28...	1315	2010	297	0	140	37	.3	4.9
APR.								
04...	1305	1730	256	16	94	38	.3	4.6
07...	1315	6760	167	4	56	25	.2	3.5
MAY								
16...	1440	13100	166	5	46	17	.2	6.3
26...	1300	1780	300	0	83	34	.3	4.0
JUNE								
13...	1455	--	--	--	--	--	--	--
14...	1300	3940	230	6	64	29	.2	4.4
28...	1310	1190	266	16	85	41	.3	4.6
JULY								
05...	1040	3300	209	10	59	22	.3	4.4
28...	1240	694	270	11	88	51	.4	3.0
AUG.								
01...	1515	--	--	--	--	--	--	--
18...	1330	595	300	0	99	67	.5	2.4
29...	1300	639	250	0	74	47	.3	1.2
SEP.								
12...	1115	1010	302	0	100	66	.5	2.4
26...	1300	3110	176	0	52	23	.3	3.1

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum, 1,170 micromhos Feb. 9, 1972; minimum, 270 micromhos Apr. 22, 1964.
pH (1964-71): Maximum, 9.3 May 19, 20, 1971; minimum, 6.7 Oct. 30, 1969.
Dissolved oxygen (1964-68, 1969-70, 1971-72): Maximum, 15.0 mg/l on several days during 1964, 1966, 1968 and 1972; minimum, 0.0 mg/l on many days during 1964-66, 1970-71.
Water temperatures (1964-70, 1971-72): Maximum, 37.0°C Aug. 16-18, 1965; minimum, 1.0°C on Jan. 16, 31, 1972.

REMARKS.--Continuous water-quality recorder operated since March 1964. Minimum recorded pH of 5.7 occurred on Feb. 9, 1972. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Great Miami River at Miamisburg, Ohio (station 03271500, drainage area 2,71 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
19...	13	410	290	72	713	--	--
28...	--	--	--	--	--	<.5	9.0
29...	15	496	330	70	856	--	--
NOV.							
19...	11	532	350	92	880	--	--
23...	12	480	330	86	805	--	--
DEC.							
03...	10	476	360	100	786	--	--
16...	17	304	240	91	488	--	--
JAN.							
11...	19	396	310	110	633	--	--
21...	18	490	370	120	764	--	--
FEB.							
09...	21	578	400	130	917	--	--
22...	20	486	350	120	737	--	--
MAR.							
17...	30	404	300	100	631	--	--
28...	22	490	350	110	734	--	--
APR.							
04...	20	586	340	100	719	--	--
07...	15	286	210	66	469	--	--
MAY							
16...	28	298	220	76	453	--	--
26...	17	462	350	100	721	--	--
JUNE							
13...	--	--	--	--	--	<.5	9.0
14...	19	394	290	91	598	--	--
28...	20	492	340	95	737	--	--
JULY							
05...	19	324	270	82	547	--	--
28...	13	430	330	90	765	--	--
AUG.							
01...	--	--	--	--	--	4.8	--
18...	11	506	340	94	852	--	--
29...	5.5	388	270	64	672	--	--
SEP.							
12...	11	506	340	92	853	--	--
26...	14	276	210	66	469	--	--

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	827	810	839	813	797	740	491	412	853	776	---	---
2	843	813	890	732	795	756	553	466	876	783	---	---
3	858	819	876	732	800	759	624	552	884	801	---	---
4	843	806	864	837	807	776	670	615	896	821	---	---
5	878	774	902	851	776	612	745	643	912	828	---	---
6	878	827	905	864	750	678	748	701	918	818	---	---
7	909	849	869	696	683	599	754	721	1010	821	722	680
8	899	849	898	795	631	589	757	724	999	899	746	704
9	899	840	909	836	690	628	784	742	1170	904	756	708
10	869	806	870	842	708	673	781	700	948	891	746	612
11	824	734	860	839	741	672	747	619	958	888	755	722
12	875	612	875	828	781	732	622	589	1010	897	735	689
13	869	825	891	833	800	750	659	609	1040	951	704	644
14	879	801	849	821	818	563	731	650	1010	911	705	642
15	833	771	836	792	659	546	772	674	967	789	699	618
16	782	698	861	789	569	485	834	720	827	685	645	549
17	720	576	890	837	645	533	865	777	701	665	599	563
18	695	609	876	849	708	608	857	779	698	661	627	585
19	725	636	897	762	728	669	854	770	706	682	668	606
20	786	725	843	792	750	586	841	769	721	673	704	642
21	800	762	810	771	735	700	834	757	751	695	717	671
22	822	770	803	777	763	687	829	763	767	692	698	606
23	833	795	839	771	782	743	815	715	845	759	661	608
24	825	759	870	644	783	753	766	700	848	819	712	658
25	764	713	878	846	765	735	789	612	---	---	716	700
26	795	695	866	834	760	702	806	769	---	---	706	688
27	842	794	840	816	712	629	822	765	---	---	730	693
28	869	827	857	809	665	601	869	771	---	---	740	724
29	890	845	813	773	749	653	908	805	---	---	732	690
30	891	846	797	735	754	304	867	769	---	---	695	665
31	870	834	---	---	498	394	848	779	---	---	690	666
MONTH	909	576	909	644	818	304	908	412	1170	661	756	549

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	693	679	726	695	693	644	666	572	855	770	827	802
2	703	690	744	722	726	686	687	671	824	780	826	785
3	725	692	743	729	720	711	690	669	829	802	818	634
4	755	716	741	725	713	693	680	657	807	768	707	674
5	757	718	746	723	707	686	657	540	786	757	728	636
6	743	731	744	732	719	695	587	546	817	772	838	728
7	734	421	734	713	701	675	633	587	806	735	857	824
8	421	280	713	513	719	684	650	633	796	740	868	781
9	372	290	551	509	719	696	656	650	821	790	868	838
10	436	370	498	446	722	672	678	651	820	805	891	845
11	463	430	507	452	705	644	696	677	836	812	889	847
12	623	383	693	507	684	639	690	677	835	813	866	797
13	598	375	602	522	720	365	704	680	832	802	797	581
14	620	482	570	521	636	399	713	689	803	788	693	621
15	504	473	578	419	620	570	728	698	834	793	716	693
16	527	450	464	399	656	590	708	570	834	795	715	620
17	551	497	533	461	659	644	671	617	854	829	636	618
18	549	503	584	533	653	642	689	639	852	840	668	630
19	615	545	624	582	689	650	688	626	869	825	713	652
20	623	546	636	623	702	686	729	688	836	815	749	677
21	546	368	645	633	704	693	718	708	815	788	767	730
22	440	370	671	644	707	699	741	717	805	774	765	735
23	408	383	680	665	710	686	732	715	816	762	786	743
24	456	390	690	674	713	680	744	722	770	746	787	595
25	513	456	695	680	683	665	762	658	757	643	597	425
26	551	503	699	675	699	669	750	657	728	668	504	451
27	581	546	698	660	744	701	754	733	701	563	545	486
28	609	564	678	650	737	719	776	735	702	474	515	464
29	615	566	678	653	735	708	779	770	714	664	501	453
30	696	606	683	576	710	635	792	776	782	714	549	489
31	---	---	668	519	---	---	794	677	811	782	---	---
MONTH	757	280	746	399	744	365	794	540	869	474	891	425
YEAR	1170	280										

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	8.3	7.6	8.5	8.2	---	---
2	---	---	---	---	---	---	8.3	8.1	8.3	8.2	---	---
3	---	---	---	---	---	---	8.6	8.0	8.3	7.8	---	---
4	---	---	---	---	---	---	8.3	7.8	8.1	7.7	---	---
5	---	---	---	---	---	---	8.2	7.8	8.4	7.9	---	---
6	---	---	---	---	---	---	8.0	7.7	8.4	8.1	---	---
7	---	---	---	---	---	---	8.3	7.9	8.7	8.2	8.5	8.3
8	---	---	---	---	---	---	8.2	8.0	8.4	7.7	8.3	7.8
9	---	---	---	---	---	---	8.4	7.9	8.5	5.7	8.2	8.1
10	---	---	---	---	7.9	7.8	8.4	8.1	8.5	8.2	8.3	8.1
11	---	---	---	---	7.9	7.8	8.2	7.6	8.6	8.2	8.4	8.1
12	---	---	---	---	8.0	7.8	7.8	7.5	8.8	8.3	8.4	8.3
13	---	---	---	---	8.0	7.9	7.9	7.4	8.5	8.3	8.3	8.0
14	---	---	---	---	8.4	8.0	7.8	7.4	8.8	8.4	8.2	8.0
15	---	---	---	---	---	---	7.8	7.3	8.8	8.3	8.2	8.0
16	---	---	---	---	---	---	8.6	7.8	9.0	8.3	8.1	7.9
17	---	---	---	---	---	---	8.2	7.9	9.0	8.5	8.1	7.9
18	---	---	---	---	---	---	8.2	7.8	8.5	8.2	8.2	8.0
19	---	---	---	---	---	---	9.0	8.2	8.3	8.1	8.3	8.1
20	---	---	---	---	---	---	8.5	8.1	9.1	8.3	8.3	8.1
21	---	---	---	---	---	---	8.2	7.9	8.6	8.3	8.2	8.0
22	---	---	---	---	8.4	8.1	8.7	8.1	8.7	8.0	8.1	7.9
23	---	---	---	---	8.5	8.3	8.3	8.1	8.6	7.8	8.0	7.5
24	---	---	---	---	8.6	8.4	8.7	8.2	8.6	8.5	7.7	7.6
25	---	---	---	---	8.4	8.2	8.5	7.9	---	---	7.8	7.6
26	---	---	---	---	8.5	8.3	8.8	8.0	---	---	7.8	7.6
27	---	---	---	---	8.3	8.1	8.5	7.9	---	---	7.9	7.7
28	---	---	---	---	8.1	7.7	8.5	8.1	---	---	7.9	7.7
29	---	---	---	---	8.2	7.7	8.7	8.2	---	---	7.9	7.7
30	---	---	---	---	8.4	7.6	8.6	8.4	---	---	7.8	7.5
31	---	---	---	---	7.9	7.5	9.0	8.4	---	---	8.0	7.8
MONTH	---	---	---	---	---	---	9.0	7.3	9.1	5.7	8.5	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.6	8.0	7.9	8.0	7.7	7.9	7.3	8.2	7.9	7.9	7.6
2	8.0	7.8	8.3	7.9	7.8	7.5	7.7	7.5	8.0	7.9	7.9	7.7
3	8.1	7.8	8.2	8.1	7.8	7.5	7.6	7.4	8.1	7.9	7.8	7.6
4	8.0	7.8	8.1	7.7	7.8	7.5	7.4	7.3	8.1	7.8	7.9	7.7
5	8.2	7.8	8.2	8.0	7.9	7.5	7.5	7.2	8.0	7.8	8.1	7.9
6	8.3	7.9	8.3	8.0	7.9	7.6	7.8	7.3	7.9	7.5	8.1	7.6
7	8.1	7.6	8.3	8.0	8.0	7.5	7.7	7.4	8.1	7.8	8.0	7.2
8	7.6	7.4	8.1	7.8	8.4	7.6	7.6	7.4	7.8	7.2	7.9	7.7
9	7.7	7.5	7.7	7.6	8.5	8.0	7.7	7.4	8.0	7.5	7.9	7.6
10	7.9	7.7	7.6	7.5	8.4	8.2	7.8	7.5	8.0	7.5	7.9	7.7
11	8.0	7.9	7.7	7.5	8.6	8.2	8.0	7.5	8.2	7.6	7.9	7.6
12	8.1	7.9	8.0	7.6	8.6	8.1	8.2	7.6	8.0	7.7	7.9	7.7
13	8.2	7.8	8.0	7.9	8.4	7.3	8.0	7.7	8.2	7.9	7.9	7.5
14	7.8	7.6	8.0	7.9	7.7	7.3	8.1	7.6	8.3	7.8	8.1	7.5
15	7.6	7.6	8.1	7.9	7.7	7.5	8.0	7.7	8.4	8.0	8.0	7.8
16	7.6	7.6	7.9	7.8	7.9	7.6	7.8	7.4	8.4	8.0	7.8	7.5
17	7.6	7.5	7.9	7.8	8.0	7.9	7.5	7.4	8.2	8.0	7.6	7.5
18	7.7	7.5	8.0	7.9	8.1	7.9	7.9	7.4	8.1	8.0	7.6	7.5
19	7.7	7.5	8.1	7.9	8.2	8.0	8.1	7.5	8.1	7.9	7.8	7.5
20	7.7	7.6	8.1	7.9	8.3	8.1	8.2	7.8	8.0	7.8	7.9	7.6
21	7.6	7.5	8.3	7.7	8.4	8.2	8.2	7.8	8.0	7.5	8.0	7.6
22	7.8	7.6	8.3	8.1	8.3	8.2	8.2	7.8	7.7	7.3	8.0	7.6
23	7.7	7.7	8.4	8.1	8.2	7.5	8.1	7.9	7.5	7.3	8.2	7.6
24	7.9	7.7	8.6	8.2	8.1	7.9	8.1	7.9	7.4	7.3	8.2	7.9
25	7.9	7.8	8.7	8.3	8.1	8.0	8.4	7.8	7.5	7.3	8.0	7.5
26	8.0	7.8	8.7	8.3	8.0	7.7	8.2	7.5	7.4	7.3	7.8	7.5
27	8.0	7.8	8.6	8.3	7.9	7.5	8.1	7.8	7.4	7.3	8.1	7.5
28	8.0	7.9	8.6	8.3	7.7	7.3	8.0	7.8	7.7	7.3	8.0	7.9
29	8.0	7.9	8.5	8.2	7.7	7.5	8.1	7.8	7.7	7.3	8.0	7.8
30	7.9	7.7	8.4	7.9	7.7	7.5	8.0	7.8	7.8	7.4	8.0	7.7
31	---	---	8.0	7.7	---	---	8.0	7.9	7.8	7.5	---	---
MONTH	8.3	7.4	8.7	7.5	8.6	7.3	8.4	7.2	8.4	7.2	8.2	7.2

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.3	0.0	4.9	3.6	---	---	11.2	10.9	---	---	---	---
2	1.3	0.0	5.2	3.6	---	---	11.3	11.1	---	---	---	---
3	1.7	0.5	4.6	3.4	---	---	11.5	11.1	---	---	---	---
4	2.1	0.4	4.8	3.3	---	---	11.2	10.8	---	---	---	---
5	2.7	0.6	5.4	3.9	---	---	11.5	10.9	---	---	---	---
6	2.1	0.1	5.5	4.1	---	---	11.9	11.5	---	---	---	---
7	1.8	0.3	6.6	4.4	---	---	11.9	11.6	---	---	12.3	11.8
8	1.8	0.3	7.7	5.5	---	---	11.9	11.4	---	---	12.1	11.5
9	2.3	0.6	6.6	5.7	---	---	13.7	11.1	15.0	10.9	12.6	11.9
10	3.7	2.2	---	---	---	---	13.6	13.3	11.6	10.9	12.8	12.1
11	4.6	3.2	---	---	---	---	13.7	12.2	11.0	10.3	12.4	11.6
12	5.1	1.6	---	---	---	---	12.6	12.1	10.7	9.9	11.6	10.5
13	4.6	3.0	---	---	---	---	12.2	12.0	10.7	9.8	10.5	9.3
14	4.5	2.5	---	---	---	---	12.9	10.9	11.6	10.7	11.0	7.8
15	3.4	1.8	---	---	---	---	14.2	12.9	11.6	10.5	11.6	11.0
16	3.5	1.7	---	---	---	---	14.1	13.0	12.4	11.5	11.5	11.0
17	5.3	3.4	---	---	---	---	13.3	12.7	12.3	11.6	11.2	10.9
18	5.2	4.5	---	---	---	---	12.7	12.3	11.6	11.1	11.6	11.2
19	4.9	3.1	---	---	---	---	12.3	11.6	11.9	11.2	11.7	11.3
20	3.1	1.6	---	---	---	---	11.6	10.4	12.4	11.7	11.4	10.2
21	2.6	1.1	---	---	---	---	13.4	9.9	11.9	10.8	10.5	9.8
22	1.9	1.0	---	---	12.7	12.2	12.8	11.3	12.3	9.8	10.3	9.6
23	1.4	0.6	---	---	12.8	12.5	11.4	11.2	11.8	11.1	11.1	10.3
24	3.3	0.6	---	---	12.6	11.9	12.0	11.3	10.9	10.4	11.4	10.8
25	4.1	3.1	---	---	12.1	11.7	11.5	10.2	---	---	11.6	10.9
26	3.9	3.0	---	---	11.7	10.5	12.1	10.1	---	---	11.4	10.7
27	3.1	1.8	---	---	10.6	10.0	---	---	---	---	10.9	9.9
28	3.0	0.9	---	---	10.0	9.6	---	---	---	---	10.5	9.8
29	2.1	0.9	---	---	10.1	9.8	---	---	---	---	10.2	9.7
30	2.5	1.2	---	---	10.2	9.2	---	---	---	---	11.1	9.5
31	3.8	1.7	---	---	10.9	9.9	---	---	---	---	11.2	10.3
MONTH	5.3	0.0	---	---	---	---	14.2	9.9	---	---	12.8	7.8

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.9	10.2	9.6	8.7	8.5	7.6	8.9	6.2	6.1	3.0	4.5	2.5
2	11.4	10.2	9.4	8.6	8.1	7.2	8.1	6.0	5.2	2.4	3.3	2.0
3	11.7	10.1	9.0	8.2	7.5	6.0	6.9	5.6	4.4	2.0	3.8	2.5
4	11.7	9.8	8.8	7.7	6.9	5.8	7.1	5.6	5.5	2.4	5.1	4.0
5	11.6	9.4	8.7	7.2	6.8	5.3	7.5	7.1	6.7	3.6	5.4	3.6
6	11.2	8.4	9.1	7.4	8.1	4.8	7.4	7.1	4.8	2.8	5.1	1.6
7	10.6	8.1	9.3	7.7	10.5	5.9	7.5	7.0	5.6	3.4	3.3	2.0
8	12.3	10.6	8.3	7.5	12.9	6.1	7.3	6.9	5.7	3.5	2.9	1.0
9	12.5	11.8	8.8	8.4	11.0	6.4	7.3	6.5	7.0	3.6	2.9	1.6
10	11.8	10.6	9.4	7.9	10.8	5.3	7.4	6.0	7.7	3.7	2.9	0.5
11	10.6	9.5	9.2	8.7	12.0	6.8	7.8	5.9	8.9	3.8	3.4	1.3
12	9.9	8.8	9.3	8.7	10.5	6.6	9.1	5.8	7.3	2.4	3.1	1.9
13	8.9	8.6	8.8	8.4	7.7	5.8	7.9	4.4	7.7	2.2	5.8	3.0
14	9.0	7.7	8.9	8.5	7.4	6.0	7.6	4.0	6.6	2.6	5.4	3.0
15	8.2	8.0	8.7	8.5	7.6	6.8	6.5	4.4	4.2	1.4	5.9	3.4
16	8.5	8.3	8.8	8.5	8.0	6.0	6.3	5.4	4.1	1.8	4.6	3.2
17	9.2	8.8	9.2	8.5	8.4	7.8	7.5	5.5	4.0	1.1	4.2	3.7
18	9.6	9.1	8.9	8.5	8.4	7.9	7.6	6.1	4.3	1.0	4.0	2.9
19	9.3	8.9	9.2	8.6	8.1	7.2	6.2	4.1	2.2	0.8	4.2	2.7
20	9.1	8.8	9.4	8.8	8.1	5.9	6.1	3.8	2.8	0.7	4.2	3.2
21	9.7	9.2	10.1	8.9	8.0	6.6	5.7	3.2	3.7	1.1	4.1	3.0
22	9.8	9.7	10.2	8.8	8.1	6.8	6.7	3.0	2.9	1.5	5.6	3.5
23	9.7	9.4	10.9	8.6	9.4	8.0	6.3	2.9	2.7	0.7	5.7	2.9
24	9.5	7.8	12.0	8.4	8.4	7.7	5.7	3.0	2.8	1.5	6.8	3.1
25	9.3	8.8	12.3	8.5	7.9	7.0	6.7	3.0	3.1	1.7	7.7	6.8
26	9.1	8.5	12.0	8.4	7.2	6.9	6.1	3.1	3.4	2.2	7.7	6.4
27	8.9	8.3	11.9	6.4	7.1	5.9	5.4	3.1	4.5	2.5	7.8	7.2
28	8.9	8.5	11.6	7.1	7.5	5.2	5.8	2.6	5.3	3.5	7.9	7.1
29	9.0	8.6	9.2	6.7	8.0	5.4	5.8	2.8	6.0	3.0	7.7	7.5
30	9.4	9.0	7.0	5.7	8.2	5.7	6.5	3.0	5.2	1.8	8.2	6.9
31	---	---	7.5	5.5	---	---	7.5	3.1	5.0	2.5	---	---
MONTH	12.5	7.7	12.3	5.5	12.9	4.8	9.1	2.6	8.9	0.7	8.2	0.5
YEAR	15.0	0.0										

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	28.5	27.0	20.5	19.0	10.5	9.0	6.5	5.5	5.0	2.5	---	---
2	28.5	26.5	20.0	19.0	10.0	5.5	5.5	5.0	6.0	4.5	---	---
3	28.0	26.5	20.0	18.5	10.0	8.5	6.0	5.0	7.0	5.5	---	---
4	29.5	26.5	18.5	16.5	10.0	8.0	6.5	5.5	5.5	2.0	---	---
5	28.5	26.0	16.5	15.0	9.5	7.5	6.0	5.0	3.5	1.5	---	---
6	27.0	24.5	15.5	14.0	10.5	8.0	5.0	3.5	4.0	3.0	---	---
7	26.0	23.5	14.0	11.5	12.0	10.0	4.5	3.5	3.5	2.0	6.0	4.5
8	25.5	22.0	13.0	10.5	11.0	10.0	4.5	3.5	5.0	2.5	6.5	6.0
9	22.0	20.5	14.0	10.0	11.0	5.0	5.5	4.5	6.5	4.0	8.0	5.0
10	20.5	19.0	11.0	10.0	12.5	11.0	6.5	5.5	5.5	3.5	6.0	5.0
11	19.0	17.5	11.5	11.0	12.5	11.5	6.5	5.5	6.5	5.0	6.5	6.0
12	18.5	17.5	12.5	11.5	11.5	11.0	6.0	5.5	7.0	5.5	9.5	6.5
13	20.0	18.5	14.0	12.5	10.5	10.0	6.5	6.0	6.5	5.0	12.5	5.5
14	21.5	20.0	14.5	13.5	10.5	8.0	6.5	5.0	5.0	4.0	12.5	9.0
15	21.5	15.5	15.0	10.5	9.0	8.0	5.5	2.0	6.5	4.5	9.0	7.0
16	22.0	21.5	15.5	14.5	8.5	6.5	2.5	1.0	5.0	3.5	8.0	7.0
17	22.0	19.5	16.0	15.5	7.5	6.5	4.0	2.0	5.0	3.0	8.0	7.5
18	21.0	20.0	16.0	16.0	6.5	4.5	5.0	3.0	5.5	4.5	8.0	7.0
19	22.5	20.5	16.5	14.5	4.5	3.5	4.5	3.5	5.0	2.0	8.0	7.5
20	23.0	21.5	14.5	12.5	5.5	4.0	5.5	4.5	2.5	1.5	10.0	8.0
21	23.0	22.0	12.5	11.0	6.0	5.5	6.0	5.5	4.5	2.0	12.0	10.0
22	22.5	22.0	11.0	10.0	6.5	5.0	7.5	6.0	6.0	4.5	12.5	10.0
23	23.0	22.0	10.0	8.5	5.5	5.0	8.0	7.0	6.0	5.5	10.0	6.5
24	22.5	21.0	11.5	9.0	6.5	5.5	7.0	6.0	6.0	5.5	7.0	5.5
25	21.0	20.5	11.5	11.0	7.0	6.5	8.0	4.0	---	---	7.0	6.0
26	21.5	20.0	11.5	11.0	8.5	7.0	4.5	3.5	---	---	8.5	6.0
27	21.5	20.0	11.0	10.5	10.0	8.5	4.0	2.5	---	---	9.5	8.0
28	21.0	19.5	11.5	10.5	10.5	9.0	4.5	2.5	---	---	11.5	9.5
29	21.5	20.0	11.5	10.5	9.0	7.5	4.0	2.5	---	---	11.0	9.0
30	21.5	20.0	11.0	10.5	10.5	7.5	3.5	1.5	---	---	9.5	8.0
31	21.5	20.5	---	---	9.0	6.5	3.0	1.0	---	---	11.0	9.0
MONTH	29.5	15.5	20.5	8.5	12.5	3.5	8.0	1.0	7.0	1.5	12.5	4.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	18.5	16.5	18.5	16.0	25.0	21.0	27.0	26.0	32.0	27.0
2	9.0	8.0	20.0	18.0	20.0	18.0	25.5	23.5	27.0	25.5	27.5	27.0
3	10.0	7.5	20.5	19.0	21.5	19.5	25.0	23.5	27.5	26.5	27.0	23.0
4	12.0	10.0	19.0	18.0	25.0	21.0	24.0	22.0	27.5	25.5	23.0	22.5
5	14.0	11.0	19.0	17.0	26.0	22.5	22.0	20.5	26.5	24.0	23.5	22.0
6	15.5	12.5	19.5	17.5	25.5	23.5	22.0	20.0	26.0	24.0	24.0	22.5
7	15.0	5.5	21.0	18.5	25.5	23.0	22.0	20.5	25.0	24.0	25.0	23.5
8	5.5	2.5	20.0	17.5	25.5	22.5	23.0	20.0	24.0	23.0	25.0	24.5
9	5.5	2.0	17.5	13.0	24.5	22.5	24.0	21.5	24.0	22.5	24.5	24.0
10	9.0	5.0	13.5	11.0	23.5	21.5	25.0	22.5	24.5	22.0	24.5	23.0
11	12.5	9.0	15.5	12.0	23.0	19.5	27.0	23.5	25.0	23.0	26.5	23.5
12	15.0	12.0	17.0	14.0	23.0	20.0	28.5	25.0	26.0	24.0	27.5	24.5
13	17.5	15.0	17.5	15.5	22.0	20.5	29.5	26.0	27.5	25.0	27.0	24.5
14	17.0	15.5	17.0	15.0	23.5	20.5	29.0	26.5	28.0	26.5	27.0	24.5
15	16.5	16.0	17.0	15.5	23.0	22.0	28.5	26.0	28.0	27.0	25.5	24.0
16	16.5	15.5	15.5	14.5	23.5	21.5	26.5	25.0	28.0	26.0	24.0	23.0
17	16.0	14.0	16.5	14.0	23.0	21.0	26.5	24.5	29.0	27.5	25.0	22.5
18	16.5	14.0	18.5	15.5	23.5	21.5	28.0	25.5	30.5	28.5	25.5	23.0
19	16.5	15.5	20.5	18.0	25.5	22.5	29.5	26.5	30.5	29.0	26.0	24.5
20	16.5	14.5	20.0	19.0	25.0	24.0	31.0	27.5	29.5	28.5	25.0	23.0
21	14.5	12.0	21.5	19.5	24.0	22.5	32.0	28.5	29.5	27.5	25.0	23.0
22	12.5	11.5	23.0	21.0	22.5	19.0	32.5	29.0	29.0	27.5	24.0	22.5
23	13.0	11.5	24.0	22.5	19.0	17.0	32.5	29.0	29.5	28.0	23.5	22.0
24	13.0	12.5	25.0	23.0	16.5	15.5	32.0	29.0	29.5	27.0	23.0	20.0
25	13.0	11.5	26.0	23.5	18.0	15.0	30.0	27.5	29.5	27.0	20.0	18.0
26	14.0	11.5	26.0	24.0	21.0	17.0	28.5	26.0	29.0	26.5	20.5	19.0
27	15.0	12.5	25.5	23.0	24.0	19.0	28.0	26.0	28.5	25.5	21.0	20.0
28	15.0	13.5	24.5	21.5	24.5	22.0	27.5	26.0	26.0	23.5	20.0	19.0
29	16.0	14.5	23.5	22.0	24.0	22.0	26.5	24.5	27.0	24.0	19.5	19.0
30	16.5	15.5	22.0	20.5	23.0	22.0	26.0	23.5	29.0	26.0	19.0	16.5
31	---	---	20.5	17.0	---	---	27.0	25.0	31.0	26.5	---	---
MONTH	17.5	2.0	26.0	11.0	26.0	15.0	32.5	20.0	31.0	22.0	32.0	16.5
YEAR	32.5	1.0										

03272010 TWIN CREEK AT GERMANTOWN, OHIO

LOCATION.--Lat 39°37'22", long 84°23'33", NE 1/4 sec.14, T.3 N., R.4 E., Montgomery County, at bridge on State Highway 725, 1 mile downstream from gaging station, and approximately 0.1 mile west of Germantown.

DRAINAGE AREA.--275 sq mi (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT.								
06...	0925	9.0	324	0	52	20	--	.020
13...	0940	15	314	0	53	20	.4	.020
20...	0955	18	306	0	54	22	--	.010
27...	0905	20	312	0	53	20	--	.030
NOV.								
10...	0920	16	328	0	59	22	--	.030
DEC.								
15...	0940	630	206	0	51	26	--	.14
JAN.								
19...	0930	175	318	0	79	34	--	.030
FEB.								
16...	0925	300	220	0	47	32	--	.060
MAR.								
15...	1305	334	246	0	61	38	--	.040
APR.								
19...	0940	541	260	0	57	24	--	.040
MAY								
17...	1135	670	240	0	51	20	--	.050
JUNE								
21...	1220	125	298	0	56	28	--	.020
JULY								
05...	1240	64	298	0	63	30	--	.020
12...	1230	40	282	0	54	26	--	.020
19...	1120	36	240	0	54	28	--	.020
26...	1150	24	276	0	51	28	--	.010
AUG.								
02...	1125	20	268	0	55	28	--	.020
09...	1235	20	270	0	56	28	--	.090
16...	1310	15	272	0	54	25	.4	.020
23...	0915	20	273	0	54	22	--	.010
30...	1115	12	296	0	53	24	--	.020
SEP.								
06...	1115	14	290	0	51	22	--	.020
13...	1120	10	286	0	51	30	--	.030
20...	1310	12	276	0	51	28	--	.020
27...	1115	31	281	0	51	27	--	.020

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.								
06...	64	618	7.8	13.5	20	2	8.7	83
13...	52	614	7.8	8.5	15	0	9.3	79
20...	58	600	7.4	15.0	20	2	8.4	82
27...	54	600	7.7	14.5	25	2	7.9	77
NOV.								
10...	70	638	8.0	4.0	3	2	11.2	85
DEC.								
15...	90	523	7.6	8.0	150	2	11.5	97
JAN.								
19...	140	716	8.0	.5	6	4	14.0	97
FEB.								
16...	60	505	7.9	.5	30	4	14.0	97
MAR.								
15...	120	660	8.1	4.5	35	2	12.5	96
APR.								
19...	110	600	8.0	14.0	30	0	9.9	95
MAY								
17...	100	576	8.0	14.0	40	2	9.8	94
JUNE								
21...	120	658	8.2	19.5	9	2	9.3	100
JULY								
05...	86	624	8.2	17.0	8	2	9.4	97
12...	78	592	8.1	22.5	5	2	11.1	130
19...	93	530	7.9	25.0	10	4	9.0	110
26...	74	571	8.0	22.5	10	2	8.4	95
AUG.								
02...	70	565	8.0	22.0	10	4	7.8	89
09...	78	561	8.0	19.0	15	4	8.8	94
16...	76	567	8.0	22.0	20	4	9.0	100
23...	66	565	7.6	22.0	20	4	6.0	68
30...	77	594	7.9	21.0	10	2	7.2	80
SEP.								
06...	72	600	7.6	17.5	15	4	8.6	90
13...	65	590	7.7	22.0	15	8	8.0	92
20...	74	590	7.6	21.0	8	4	8.1	90
27...	80	580	7.6	20.0	15	2	8.1	88

03272010 TWIN CREEK AT GERMANTOWN, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. Records of discharge are given for Twin Creek near Germantown, Ohio (station 03272000).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)
OCT.									
06...	.07	1.5	6.7	.11	.14	.070	.21	348	330
13...	.05	1.2	5.5	.09	.12	.080	.24	364	310
20...	.04	.7	3.0	.02	.02	.060	.19	342	310
27...	.10	.2	.6	.02	.02	.080	.26	334	310
NOV.									
10...	.09	2.5	11	.14	.18	.030	.09	372	340
DEC.									
15...	.45	6.0	26	.16	.21	.54	1.6	342	260
JAN.									
19...	.11	6.8	30	.02	.03	.050	.15	445	400
FEB.									
16...	.19	4.5	20	.08	.10	.20	.62	332	240
MAR.									
15...	.14	8.6	38	.46	.59	.10	.31	412	320
APR.									
19...	.13	8.2	36	.24	.31	.12	.38	392	320
MAY									
17...	.17	8.8	39	.26	.34	.15	.46	372	300
JUNE									
21...	.08	8.2	36	.24	.31	.080	.24	408	360
JULY									
05...	.05	3.6	16	.25	.32	.030	.10	408	330
12...	.07	2.4	11	.25	.32	.050	.15	342	310
19...	.01	1.5	6.5	.30	.39	.070	.22	320	290
26...	.04	1.7	7.6	.27	.35	.070	.21	342	300
AUG.									
02...	.08	1.3	6.0	1.2	1.6	.060	.17	355	290
09...	.31	1.2	5.2	.35	.45	.060	.19	340	300
16...	.07	1.5	6.5	.59	.76	.060	.17	351	300
23...	.05	.9	3.8	.35	.45	.040	.13	320	290
30...	.07	1.4	6.0	.20	.25	.060	.18	366	320
SEP.									
06...	.08	1.6	7.0	.14	.18	.050	.15	353	310
13...	.09	1.2	5.1	.61	.78	.050	.15	355	300
20...	.07	1.0	4.3	.54	.70	.060	.17	335	300
27...	.08	2.1	9.2	.74	.95	.10	.29	339	310

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	400	20	0	3	4	40	2	.00	0
14...	230	21	--	--	--	--	--	--	--
AUG.									
16...	430	29	0	2	12	0	0	.01	0

03272100 GREAT MIAMI RIVER AT MIDDLETOWN, OHIO

LOCATION.--Lat 39°32'31", long 84°21'27", in sec.18, R.4 T.2, Butler County, on left bank at County Park dock at Middletown, about 0.6 mile downstream from New York Central Railroad bridge, and 0.3 mile downstream from Twin Creek.

DRAINAGE AREA.--3,134 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)
OCT.												
06...	1000	296	0	94	56	--	.19	.61	.7	3.0	.06	.08
13...	1015	286	0	85	56	.5	.12	.39	2.8	12	.10	.13
20...	1025	270	0	78	50	--	.14	.47	2.7	12	.03	.04
27...	0950	284	0	80	54	--	.18	.59	2.5	11	.04	.06
NOV.												
10...	0955	314	0	88	56	--	.11	.37	2.5	11	.12	.15
DEC.												
15...	1010	212	0	64	28	--	.11	.36	2.8	12	.26	.34
JAN.												
19...	1000	326	0	96	44	--	.070	.22	5.1	22	.47	.60
FEB.												
16...	0950	278	0	70	64	.1	.10	.33	2.9	13	1.0	1.3
MAR.												
15...	1345	284	0	79	32	--	.060	.21	5.0	22	.84	1.1
APR.												
19...	1010	226	0	60	26	--	.030	1.0	7.2	32	.36	.46
MAY												
17...	1315	206	0	50	18	.3	.14	.47	5.9	26	.21	.27
JUNE												
21...	1340	292	0	75	46	--	.10	.35	4.8	21	.48	.62
JULY												
05...	1345	260	0	57	32	--	.13	.42	3.2	14	.72	.92
12...	1320	292	0	78	46	--	.10	.32	3.0	14	.36	.46
19...	1205	284	0	75	44	--	.050	.17	2.3	10	.61	.78
26...	1240	286	0	78	50	--	.070	.24	2.3	10	.33	.42
AUG.												
02...	1205	318	0	91	62	--	.080	.28	1.9	8.4	1.3	1.7
09...	1310	304	0	88	64	--	.12	.40	1.3	6.0	.48	.62
16...	1350	318	0	91	70	.5	.16	.51	1.5	6.5	.68	.88
23...	1000	276	0	89	60	--	.14	.44	1.9	8.3	.41	.53
30...	1200	254	0	75	52	--	.070	.24	1.9	8.5	.20	.26
SEP.												
06...	1210	268	0	73	53	--	.10	.33	1.8	8.1	.67	.87
13...	1220	300	0	69	68	--	.12	.41	2.4	10	.88	1.1
20...	1400	256	0	82	56	--	.11	.37	2.4	11	.67	.87
27...	1210	192	0	54	32	--	.10	.32	2.8	12	.36	.46

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	330	38	20	9	26	60	10	.00	1
20...	330	--	--	6	--	40	--	--	--
FEB.									
16...	540	22	10	16	16	84	10	.01	0
MAY									
17...	2700	140	10	17	25	130	6	.00	0
JULY									
12...	400	--	--	15	--	70	--	--	0
19...	10	--	--	2	--	50	--	--	1
AUG.									
09...	240	--	--	6	--	40	--	--	0
16...	220	51	0	6	12	20	5	.01	1
SEP.									
13...	240	--	--	18	--	60	--	--	8
20...	240	--	--	11	--	50	--	--	--

03272100 GREAT MIAMI RIVER AT MIDDLETOWN, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.												
06...	1.3	4.1	466	320	77	795	7.4	26.0	8	4	2.0	24
13...	1.2	3.6	462	300	65	780	7.6	20.0	15	8	4.5	49
20...	.98	3.0	418	300	78	712	7.3	23.0	15	4	3.8	44
27...	1.1	3.3	448	310	77	756	7.4	22.5	20	4	3.6	41
NOV.												
10...	1.3	4.1	496	330	72	818	7.4	14.0	10	2	5.9	57
DEC.												
15...	.54	1.6	338	260	86	535	7.4	10.0	110	4	10.6	94
JAN.												
19...	.67	2.1	500	400	130	784	7.7	4.5	15	4	12.2	94
FEB.												
16...	.72	2.2	462	310	82	745	7.9	5.5	35	4	11.8	94
MAR.												
15...	.41	1.3	447	350	120	717	7.9	8.0	25	8	11.0	92
APR.												
19...	.59	1.8	326	310	120	539	7.7	15.5	160	4	8.8	87
MAY												
17...	.50	1.5	312	260	90	497	7.9	15.5	160	4	9.4	93
JUNE												
21...	.59	1.8	454	290	50	718	7.9	23.5	10	2	7.0	81
JULY												
05...	.52	1.6	402	290	76	594	7.8	22.0	40	2	6.8	77
12...	.67	2.0	430	360	120	716	7.8	27.5	15	2	7.5	94
19...	.72	2.2	412	310	81	673	7.8	28.5	15	4	4.8	62
26...	.96	3.0	458	320	85	713	8.0	29.0	15	4	6.1	78
AUG.												
02...	1.0	3.1	517	360	99	804	8.0	29.0	10	4	3.8	49
09...	1.0	3.2	485	330	80	780	8.0	25.0	20	4	5.9	70
16...	1.2	3.6	514	350	89	834	8.0	29.5	10	8	4.5	58
23...	1.0	3.1	466	310	84	766	7.5	30.0	20	4	1.3	17
30...	.80	2.5	432	280	72	680	7.7	27.5	10	4	4.7	59
SEP.												
06...	.94	2.9	416	300	80	700	7.4	24.0	10	4	5.1	60
13...	1.4	4.4	490	350	100	820	7.8	27.0	10	8	5.1	60
20...	1.1	3.4	436	310	100	705	7.7	26.0	10	4	6.2	76
27...	.63	1.9	308	230	72	500	7.4	21.5	65	4	7.8	88

03272400 GREAT MIAMI RIVER NEAR MIDDLETOWN, OHIO

LOCATION.--Lat 39°25'46", long 84°28'35", Butler County, at bridge on Liberty-Fairfield Road, southwest of Middletown, 0.7 mile upstream from Baltimore and Ohio Railroad bridge.

DRAINAGE AREA.--3,280 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)
OCT.												
06...	1030	294	0	110	64	--	.21	.69	2.3	10	.19	.24
13...	1045	292	0	100	66	.7	.21	.68	2.3	10	.93	1.2
20...	1055	272	0	84	48	--	.13	.44	2.3	10	.21	.28
27...	1030	292	0	92	58	--	.23	.76	2.3	10	.18	.23
NOV.												
10...	1020	310	0	99	68	--	.19	.61	2.0	9.0	.63	.81
DEC.												
15...	1050	164	0	55	18	--	.14	.45	3.5	15	.29	.38
JAN.												
19...	1035	320	0	100	46	--	.080	.28	5.2	23	.70	.90
FEB.												
16...	1020	272	0	72	72	.2	.11	.36	2.6	12	.77	.99
MAR.												
15...	1415	286	0	77	38	--	.070	.23	5.1	23	.95	1.2
APR.												
19...	1040	220	0	62	24	--	.16	.54	5.9	26	.38	.49
MAY												
17...	1345	204	0	51	18	.2	.13	.43	6.2	28	.23	.29
JUNE												
21...	1405	276	0	74	38	--	.11	.37	5.0	22	.72	.92
JULY												
05...	1415	292	0	75	40	--	.12	.40	3.8	17	.71	.91
12...	1350	276	0	84	46	--	.10	.35	4.7	21	.89	1.1
19...	1245	290	0	84	40	--	.030	.11	2.8	12	.51	.66
26...	1310	296	0	87	58	--	.10	.34	2.6	11	.87	1.1
AUG.												
02...	1240	300	0	95	74	--	.090	.31	1.3	6.0	1.2	1.6
09...	1340	284	0	91	64	--	.11	.37	1.6	7.0	1.0	1.3
16...	1415	300	0	100	66	.6	.10	.35	1.2	5.2	.81	1.0
23...	1030	286	0	100	70	--	.14	.45	1.7	7.5	1.1	1.4
30...	1250	244	0	85	66	--	.14	.46	1.5	6.8	.36	.46
SEP.												
06...	1245	260	0	92	71	--	.23	.73	5.2	23	.75	.97
13...	1255	300	0	86	76	--	.16	.52	1.6	7.3	.81	1.0
20...	1435	250	0	90	66	--	.13	.44	2.1	9.2	.68	.88
27...	1240	186	0	56	36	--	.10	.34	3.4	15	.34	.43

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	830	42	0	6	30	90	14	.02	3
20...	540	--	--	4	--	70	--	--	--
FEB.									
16...	950	40	30	19	27	120	10	.02	2
MAY									
17...	2300	110	0	15	12	130	4	.00	0
JULY									
12...	610	--	--	12	--	110	--	--	0
19...	10	--	--	0	--	50	--	--	4
AUG.									
09...	470	--	--	10	--	70	--	--	0
16...	500	75	0	6	14	50	5	.00	3
SEP.									
13...	770	--	--	28	--	80	--	--	2
20...	610	--	--	12	--	70	--	--	--

03272400 GREAT MIAMI RIVER NEAR MIDDLETOWN, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. No discharge records available. Prior to May 1965, sampling site was 0.7 mile downstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	ODOR (THRES-HOLD NUMBER)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.												
06...	.92	2.8	500	330	88	838	7.7	22.5	15	4	3.9	44
13...	1.0	3.1	496	320	80	853	7.3	18.0	15	8	3.8	40
20...	.76	2.3	438	310	86	726	7.4	21.0	15	2	5.0	56
27...	1.0	3.2	482	330	90	793	7.6	20.0	20	4	4.3	47
NOV.												
10...	1.2	3.8	524	340	86	868	7.4	12.0	20	2	5.0	46
DEC.												
15...	1.1	3.4	254	210	76	415	7.5	10.5	150	4	11.0	98
JAN.												
19...	.71	2.2	503	390	130	792	7.7	5.5	15	4	12.9	100
FEB.												
16...	.74	2.3	488	310	86	756	7.8	5.0	45	2	11.4	89
MAR.												
15...	.48	1.5	453	340	100	729	7.8	7.0	30	8	11.2	92
APR.												
19...	.47	1.4	362	270	90	538	7.8	15.5	130	4	8.7	86
MAY												
17...	.48	1.5	330	270	100	498	7.9	15.5	120	2	9.5	94
JUNE												
21...	.63	1.9	438	330	100	685	7.9	23.5	35	2	7.1	82
JULY												
05...	.82	2.5	438	330	90	687	7.8	22.5	50	4	7.0	80
12...	.81	2.5	446	330	100	712	7.9	27.0	20	4	8.4	100
19...	.73	2.2	436	330	92	707	7.9	28.0	20	4	7.6	96
26...	.83	2.5	500	350	110	771	8.0	28.0	15	4	6.8	86
AUG.												
02...	.81	2.5	524	350	100	798	7.9	26.5	15	4	6.3	77
09...	.83	2.5	475	330	97	768	7.9	23.5	20	8	6.6	77
16...	.87	2.7	511	350	100	820	7.8	27.5	15	4	5.1	64
23...	.97	3.0	498	330	95	818	7.4	27.0	25	4	2.3	28
30...	.71	2.2	456	300	100	726	7.5	27.0	15	4	6.0	74
SEP.												
06...	.83	2.5	476	330	120	765	7.2	23.0	10	8	4.7	54
13...	1.2	3.8	525	340	94	855	7.3	27.5	25	8	4.4	52
20...	.87	2.7	452	320	110	730	7.4	25.0	20	8	6.3	75
27...	.77	2.4	303	220	68	495	7.6	21.5	100	4	7.7	86

03274000 GREAT MIAMI RIVER AT HAMILTON, OHIO

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec.6, T.1 N., R.3 E., Butler County, at gaging station on right bank, 1,000 ft downstream from Columbia Bridge at Hamilton, 3 miles downstream from Four Mile Creek, and 4.3 miles upstream from Pleasant Run.

DRAINAGE AREA.--3,630 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951.
Water temperatures: October 1950 to September 1951, October 1957 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 30.5°C July 23, 24; minimum, 0.5°C Jan. 17, 18.

Period of record:
Water temperatures: Maximum, 34.0°C Aug. 16, 1965; minimum, freezing point on several days during 1950 and 1951.

REMARKS.--Some regulation at low flow by industrial plants upstream from station.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.5	27.0	20.0	20.0	7.5	7.0	5.0	4.5	2.0	2.0	10.0	8.5
2	27.5	27.5	20.0	20.0	7.0	7.0	4.5	4.5	2.5	2.0	10.0	8.0
3	27.5	27.0	20.0	18.5	7.0	6.5	4.5	4.0	3.0	2.5	8.0	6.0
4	27.0	27.0	18.5	17.0	6.5	6.5	4.0	4.0	3.0	2.0	6.0	4.5
5	27.0	26.5	17.0	15.5	6.5	6.5	4.0	4.0	2.5	2.0	4.5	4.0
6	26.5	25.0	15.5	14.5	7.5	6.5	4.0	3.0	2.0	2.0	4.0	3.5
7	25.0	24.0	14.5	12.5	7.5	7.5	3.0	2.0	2.0	2.0	5.0	3.5
8	24.0	23.0	12.5	11.5	8.0	7.5	2.0	2.0	2.0	2.0	5.0	5.0
9	23.0	21.5	11.5	11.5	8.0	8.0	2.5	2.0	2.5	2.0	5.0	5.0
10	21.5	19.5	11.5	11.5	9.0	8.0	3.0	2.5	2.5	2.5	5.5	5.0
11	19.5	18.5	11.5	11.5	9.0	9.0	3.5	3.0	3.5	2.5	7.0	5.5
12	19.0	19.0	11.5	11.5	9.0	9.0	3.5	3.5	4.5	3.5	9.5	7.5
13	19.0	19.0	13.0	11.5	9.0	8.5	3.5	3.5	5.0	4.5	10.5	9.5
14	19.5	19.0	13.5	13.0	8.5	7.0	3.5	3.5	5.5	5.0	10.5	9.5
15	20.0	19.5	15.0	13.5	7.5	7.0	3.5	2.0	5.0	4.5	9.5	8.5
16	20.0	20.0	15.5	15.0	7.5	7.0	2.0	1.0	4.5	4.0	8.5	8.5
17	21.0	20.0	16.0	15.5	7.0	6.5	1.0	0.5	4.5	4.0	8.5	8.0
18	21.0	20.5	16.0	16.0	6.5	4.5	1.5	0.5	4.5	4.5	8.0	7.5
19	20.5	20.5	16.0	15.0	4.5	4.0	2.5	1.5	5.0	4.5	8.5	7.5
20	20.5	20.5	15.0	13.0	4.0	4.0	3.0	2.5	5.0	4.0	9.5	8.5
21	20.5	20.5	13.0	11.5	4.5	4.0	3.5	3.0	4.0	4.0	10.5	9.5
22	20.5	20.5	11.5	9.5	4.5	4.5	4.5	3.5	5.0	4.0	11.0	9.5
23	21.0	20.5	9.5	8.5	4.5	4.5	5.0	4.5	5.0	5.0	9.5	8.0
24	21.0	21.0	8.5	8.0	5.0	4.5	5.5	5.0	6.0	5.0	8.0	7.5
25	21.0	20.5	8.0	8.0	5.0	5.0	5.5	4.5	6.0	6.0	8.0	7.5
26	20.5	20.5	8.0	8.0	6.0	5.0	4.5	3.5	6.5	6.0	8.5	7.5
27	20.5	20.0	8.0	8.0	7.0	6.0	3.5	3.0	6.5	6.5	8.5	8.5
28	20.0	20.0	8.0	8.0	7.0	7.0	3.0	2.5	7.0	6.5	10.0	8.5
29	20.0	20.0	8.0	8.0	7.0	6.5	2.5	2.5	8.5	7.0	10.5	10.0
30	20.0	20.0	8.0	7.5	8.0	7.0	2.5	2.5	---	---	10.5	10.0
31	20.0	20.0	---	---	8.0	5.0	2.5	2.0	---	---	10.5	10.0
MONTH	27.5	18.5	20.0	7.5	9.0	4.0	5.5	0.5	8.5	2.0	11.0	3.5

03274000 GREAT MIAMI RIVER AT HAMILTON, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	10.0	15.5	15.0	19.0	18.5	24.5	23.5	26.0	26.0	27.0	27.0
2	10.0	9.5	17.0	15.5	18.5	18.5	24.5	24.5	26.0	26.0	27.0	27.0
3	9.5	9.0	17.5	17.0	19.5	18.5	25.0	24.5	26.0	26.0	27.0	27.0
4	11.0	9.5	18.0	17.5	21.0	19.5	24.5	24.0	26.0	26.0	27.0	26.5
5	12.0	10.5	18.0	18.0	22.0	21.0	24.0	23.5	26.0	26.0	26.5	25.0
6	14.5	12.0	18.5	18.0	22.0	22.0	23.5	22.5	26.0	25.5	25.0	25.0
7	14.5	7.5	18.5	18.0	22.5	22.0	22.5	22.5	25.5	24.0	25.0	25.0
8	7.5	6.5	18.5	18.5	23.0	22.5	23.0	22.5	24.0	24.0	25.0	25.0
9	6.5	5.5	18.5	16.0	23.0	22.5	23.0	23.0	24.0	24.0	25.0	25.0
10	7.0	6.0	16.0	15.0	22.5	22.0	24.0	23.0	24.0	24.0	25.0	25.0
11	9.5	7.0	15.0	15.0	22.5	21.5	24.5	24.0	24.0	24.0	25.0	25.0
12	12.0	9.5	15.5	15.0	22.0	21.5	25.5	24.0	24.0	24.0	25.0	25.0
13	14.0	12.0	15.5	15.5	21.5	21.5	26.0	25.5	24.5	24.0	25.0	24.5
14	14.5	14.0	16.0	15.5	21.5	21.5	27.0	26.0	26.0	24.5	25.5	25.0
15	14.5	14.5	15.5	15.5	22.0	21.5	27.0	27.0	26.5	26.0	25.5	25.5
16	14.5	14.5	15.5	15.5	22.5	22.0	27.0	26.5	26.5	26.5	25.5	25.0
17	14.5	14.5	15.5	15.0	22.5	22.5	26.5	26.5	27.5	26.5	25.0	25.0
18	14.5	14.5	16.0	15.0	23.0	22.5	27.0	26.5	28.5	27.5	25.0	25.0
19	14.5	14.5	17.0	16.0	23.5	23.0	27.0	27.0	28.5	28.5	25.0	25.0
20	14.5	14.5	18.0	17.0	24.0	23.5	28.0	26.5	28.5	28.0	25.0	25.0
21	14.5	13.5	19.0	18.0	24.0	23.5	29.0	28.0	28.5	28.0	25.0	25.0
22	13.5	13.0	19.5	19.0	23.5	22.0	30.0	29.0	28.5	28.0	25.0	24.5
23	13.0	13.0	20.5	19.0	22.5	21.0	30.5	30.0	28.0	27.5	24.5	24.0
24	13.0	13.0	21.5	20.5	21.0	20.0	30.5	30.0	27.5	27.5	24.0	23.5
25	13.0	13.0	22.0	21.5	20.0	19.5	30.0	29.5	27.5	27.5	23.5	22.0
26	13.0	13.0	22.5	22.0	20.0	19.5	29.5	29.0	28.0	27.5	22.0	20.5
27	14.0	13.0	22.5	22.5	22.0	20.0	29.0	28.0	28.0	27.5	20.5	20.5
28	14.0	14.0	22.5	22.5	22.5	22.0	28.0	27.5	27.5	26.5	20.5	20.0
29	14.5	14.0	22.5	22.0	22.5	22.5	27.5	26.5	26.5	26.5	20.0	20.0
30	15.0	14.5	22.0	21.0	23.5	22.5	26.5	26.0	27.0	26.5	20.0	19.0
31	---	---	21.0	19.0	---	---	26.0	25.5	27.0	26.5	---	---
MONTH	15.0	5.5	22.5	15.0	24.0	18.5	30.5	22.5	28.5	24.0	27.0	19.0
YEAR	30.5	0.5										

03274050 GREAT MIAMI RIVER NEAR HAMILTON, OHIO

LOCATION.--Lat 39°20'00", long 84°36'42", Butler County, at American Materials Company private bridge near Hamilton, 3.5 miles downstream from gaging station, and 2.4 miles upstream from Indian Creek.

DRAINAGE AREA.--3,667 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT.								
06...	1100	495	296	0	110	62	--	.33
13...	1115	572	278	0	110	72	.8	.31
20...	1130	752	252	0	88	54	--	.28
27...	1100	735	296	0	94	64	--	.32
NOV.								
10...	1050	621	310	0	110	70	--	.20
DEC.								
15...	1130	6020	232	0	75	32	--	.15
JAN.								
19...	1100	2470	318	0	99	50	--	.070
FEB.								
16...	1050	4200	268	0	75	60	.5	.13
MAR.								
15...	1430	5660	290	0	81	38	--	.090
APR.								
19...	1110	9450	218	0	59	26	--	.16
MAY								
17...	1415	12500	202	0	56	18	.3	.14
JUNE								
21...	1500	2170	188	0	55	25	--	.13
JULY								
05...	1450	3570	286	0	50	44	--	.16
12...	1430	1660	272	0	82	48	--	.15
19...	1325	1460	270	0	71	44	--	.040
26...	1415	1020	292	0	98	58	--	.16
AUG.								
02...	1500	735	296	0	96	72	--	.13
09...	1415	698	286	0	110	70	--	.16
16...	1455	621	310	0	100	72	.6	.22
23...	1110	910	252	0	93	64	--	.19
30...	1335	634	232	0	90	56	--	.019
SEP.								
06...	1320	578	270	0	110	80	--	.36
13...	1330	1540	296	0	110	88	--	.22
20...	1500	803	240	0	88	61	--	.20
27...	1410	3110	174	0	56	34	--	.12

DATE	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	ODOR (THRESHOLD NUMBER)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.								
06...	97	838	7.6	22.0	15	4	4.0	45
13...	92	875	7.4	18.0	20	8	3.2	34
20...	83	717	7.6	20.5	20	4	4.6	50
27...	87	838	7.4	20.0	25	4	4.8	43
NOV.								
10...	96	891	7.7	10.5	20	4	5.3	47
DEC.								
15...	108	611	7.4	11.0	160	4	11.5	100
JAN.								
19...	130	800	7.6	5.0	20	4	12.0	94
FEB.								
16...	90	761	7.7	6.0	50	4	11.4	91
MAR.								
15...	110	739	7.8	8.0	30	4	11.0	92
APR.								
19...	81	536	7.7	16.0	130	4	8.7	87
MAY								
17...	74	498	7.6	16.0	130	4	9.5	95
JUNE								
21...	76	480	7.6	22.0	95	4	6.6	75
JULY								
05...	95	706	7.9	23.5	50	4	6.7	78
12...	96	704	7.9	27.5	30	4	8.4	[illegible]
19...	62	693	8.0	29.0	25	8	8.1	[illegible]
26...	110	762	8.0	29.0	25	4	6.8	87
AUG.								
02...	150	819	7.8	27.0	20	8	8.5	100
09...	140	818	7.8	24.5	25	8	7.2	86
16...	96	854	7.7	28.5	20	2	4.5	58
23...	93	744	7.2	27.5	25	4	2.7	34
30...	100	690	7.6	27.0	30	4	7.4	91
SEP.								
06...	130	860	7.4	24.0	20	8	6.2	73
13...	130	910	7.3	26.5	50	8	4.9	58
20...	110	720	7.9	26.0	20	8	8.3	100
27...	88	580	6.9	21.5	85	4	7.2	81

03274050 GREAT MIAMI RIVER NEAR HAMILTON, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to September 1972.

REMARKS.--Samples for iron and manganese filtered clear when collected. Samples were collected weekly October, July to September, and monthly November to June. Records of discharge are given for Great Miami River at Hamilton, Ohio (station 03274000, drainage area 3,630 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRITE (NO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA (NH4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.									
06...	1.1	1.5	6.7	1.1	1.5	.78	2.4	500	340
13...	1.0	2.2	9.7	1.4	1.8	1.0	3.2	524	320
20...	.67	2.2	9.7	.44	.57	.76	2.3	434	290
27...	1.1	2.3	10	.61	.79	.85	2.6	498	330
NOV.									
10...	.67	1.8	8.0	1.2	1.6	1.0	3.2	538	350
DEC.									
15...	.49	3.4	15	.34	.43	1.4	4.3	384	290
JAN.									
19...	.24	5.5	24	1.2	1.6	.81	2.5	506	390
FEB.									
16...	.42	2.7	12	.52	.67	.93	2.8	456	310
MAR.									
15...	.30	4.2	18	.95	1.2	.58	1.8	457	350
APR.									
19...	.52	6.8	30	.50	.64	.50	1.5	362	260
MAY									
17...	.45	6.3	28	.32	.41	.49	1.5	330	240
JUNE									
21...	.44	4.3	19	.42	.55	.92	2.8	320	230
JULY									
05...	.53	2.9	13	.92	1.2	.87	2.7	428	330
12...	.49	3.7	16	.84	1.1	.53	1.6	444	320
19...	.14	2.6	11	.47	.60	.69	2.1	428	310
26...	.51	2.7	12	.72	.92	.81	2.5	486	350
AUG.									
02...	.43	1.7	7.6	.85	1.1	.76	2.3	519	390
09...	.51	1.6	7.3	.85	1.1	.65	2.0	517	370
16...	.73	1.1	4.9	1.5	1.9	.81	2.5	533	350
23...	.6[illegible]	.9	3.9	1.2	1.6	.89	2.7	452	300
30...	.64	2.8	12	.31	.40	.79	2.4	438	290
SEP.									
06...	1.2	5.3	23	1.6	2.0	.90	2.8	520	350
13...	.72	1.5	6.8	1.4	1.8	.97	3.0	548	370
20...	.65	2.4	10	.68	.88	.77	2.4	441	310
27...	.39	3.2	14	.54	.70	.72	2.2	301	230

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)
OCT.									
13...	730	82	0	4	13	80	10	.01	5
20...	690	--	--	3	--	80	--	--	--
FEB.									
16...	1100	42	10	18	18	110	10	.02	3
MAY									
17...	2300	120	10	20	19	140	5	.00	1
JULY									
12...	1200	--	--	18	--	130	--	--	0
19...	10	--	--	140	--	60	--	--	4
AUG.									
09...	600	--	--	8	--	50	--	--	1
16...	390	98	0	4	8	20	5	.01	2
SEP.									
13...	840	--	--	19	--	90	--	--	4
20...	530	--	--	22	--	60	--	--	--

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO

LOCATION.--Lat 39°15'47", long 84°40'04", in N 1/2 sec.34, R.1, T.2, Hamilton County, at Blue Rock Road bridge at New Baltimore, 6.4 miles downstream from Indian Creek, and 14.3 miles downstream from gaging station at Hamilton.

DRAINAGE AREA.--3,814 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1966 to September 1972.
Water temperatures: July 1966 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 960 micromhos Feb. 13; minimum, 285 micromhos Apr. 15.
Dissolved oxygen: Maximum, 15.0 mg/l Feb. 6; minimum, 0.4 mg/l Sept. 5.
Water temperatures: Maximum, 30.0°C Aug. 18, 19; minimum, 1.5°C Feb. 5.

Period of record:
Specific conductance (1967-69, 1970-72): Maximum, 1,150 micromhos Feb. 23, 1969; minimum, 230 micromhos May 24, 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
01...	0830	712	254	0	90	56	.4	1.9
11...	0830	583	272	0	110	75	.6	2.7
14...	1130	--	--	--	--	--	--	--
NOV.								
10...	--	615	312	0	110	76	.8	5.1
29...	0900	760	246	16	99	62	1.0	6.4
DEC.								
03...	0800	1000	290	0	94	58	.7	3.5
31...	0830	12800	164	0	32	19	.4	2.1
JAN.								
03...	--	6070	214	0	61	24	.3	3.7
31...	0800	1580	296	0	88	57	.4	3.8
FEB.								
11...	0900	1180	314	0	99	82	.5	4.5
18...	0830	3310	248	0	71	42	.4	3.4
MAR.								
06...	0930	5630	213	0	68	29	.2	8.9
13...	0815	2320	283	0	90	38	.4	4.8
APR.								
07...	0930	10300	242	12	89	40	.3	4.2
17...	0810	17500	186	0	51	20	.2	4.9
MAY								
17...	0850	13800	181	4	49	18	.2	5.5
30...	1630	3290	284	0	83	35	.3	3.8
JUNE								
08...	1145	1740	270	8	87	43	.3	4.8
14...	1135	--	--	--	--	--	--	--
14...	1755	5920	196	0	56	23	.2	4.1
JULY								
03...	0830	1450	203	0	76	34	.3	2.9
31...	0830	712	294	0	99	60	.5	1.6
AUG.								
14...	0930	602	169	2	100	64	.5	2.8
23...	0930	820	288	0	110	69	.6	2.6
SEP.								
15...	0800	1420	256	12	110	71	.5	2.6
29...	0830	4700	192	0	62	23	.3	2.6

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1967-68, 1970-72): Maximum, 15.0 mg/l Feb. 26, Mar. 8, June 9, 10, 1071, Feb. 6, 1972; minimum, 0.0 mg/l June 27, 1971.
Water temperatures: Maximum, 33.0°C July 18, 1969; minimum, freezing point on several days during winter months of 1970 and 1971.

REMARKS.--Continuous water-quality recorder operated since July 1966. Maximum recorded specific conductance value of 1.160 micromhos occurred Mar. 18, 1970. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Great Miami River at Hamilton, Ohio (station 03274000, drainage area 3,630 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
01...	8.5	432	300	92	735	8.0	--	--
11...	12	508	330	110	866	7.3	--	--
14...	--	--	--	--	--	--	.6	9.0
NOV.								
10...	22	572	350	94	888	7.4	--	--
29...	28	522	330	100	813	8.4	--	--
DEC.								
03...	15	502	330	92	794	8.1	--	--
31...	9.2	272	190	56	402	7.6	--	--
JAN.								
03...	16	340	280	100	551	7.2	--	--
31...	17	494	360	120	818	8.2	--	--
FEB.								
11...	20	606	400	140	933	7.4	--	--
18...	15	436	310	110	663	7.4	--	--
MAR.								
06...	39	412	290	120	598	7.5	--	--
13...	21	460	350	120	739	7.7	--	--
APR.								
07...	18	464	330	110	708	8.5	--	--
17...	22	316	220	68	471	8.1	--	--
MAY								
17...	24	320	240	85	478	8.3	--	--
30...	17	462	340	110	743	7.6	--	--
JUNE								
08...	21	474	340	100	741	8.4	--	--
14...	--	--	--	--	--	--	<.5	18
14...	18	330	230	70	500	7.4	--	--
JULY								
03...	13	338	260	93	577	7.9	--	--
31...	7.1	488	350	110	814	7.5	--	--
AUG.								
14...	12	398	250	110	649	8.3	--	--
23...	12	512	350	110	857	7.9	--	--
SEP.								
15...	11	532	350	120	846	8.6	--	--
29...	11	312	230	72	504	8.0	--	--

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	750	700	850	830	820	770	570	420	820	810	780	700
2	800	750	860	840	800	750	550	430	830	810	710	620
3	810	770	880	850	770	730	590	530	860	810	820	450
4	820	790	880	860	800	760	690	570	870	810	540	450
5	840	800	880	840	810	790	710	620	840	800	620	500
6	830	800	870	850	820	740	750	670	840	800	680	600
7	850	800	880	860	770	630	710	660	910	840	740	620
8	850	740	890	860	630	590	740	700	920	870	750	680
9	840	760	890	860	640	610	780	710	900	850	760	690
10	840	800	900	880	690	600	730	680	950	880	770	690
11	860	780	900	860	730	680	760	720	940	880	760	710
12	890	770	870	850	750	720	760	560	940	880	750	730
13	900	890	860	850	760	730	660	570	960	920	750	720
14	890	830	890	860	760	690	720	600	930	820	760	670
15	860	810	890	870	---	---	740	670	840	750	720	620
16	840	680	890	870	590	480	780	680	770	720	680	520
17	820	580	900	880	530	450	780	770	750	650	610	530
18	770	710	890	860	570	500	780	720	700	660	670	600
19	780	740	880	840	660	550	820	750	680	650	690	630
20	790	700	870	850	690	560	810	740	700	660	720	680
21	730	690	890	860	720	630	800	750	700	650	700	690
22	740	720	880	850	750	630	790	720	720	650	700	580
23	770	730	890	880	750	650	790	730	740	680	710	600
24	780	760	880	850	760	710	790	750	760	720	700	640
25	780	770	850	800	740	680	830	740	800	720	710	670
26	810	780	830	820	760	700	780	740	790	720	720	680
27	830	800	850	810	770	720	760	740	790	690	720	690
28	820	770	830	790	780	690	770	740	800	720	710	680
29	810	770	860	770	790	710	800	760	810	750	750	700
30	810	760	840	790	850	470	820	780	---	---	760	700
31	830	800	---	---	580	400	820	800	---	---	720	650
MONTH	900	580	900	770	850	400	830	420	960	650	820	450

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	710	580	650	595	680	565	670	645	830	800	760	715
2	710	680	680	655	700	660	---	---	840	800	780	735
3	710	660	700	670	725	680	620	565	840	810	790	665
4	700	680	720	675	730	680	690	620	820	760	825	780
5	700	670	790	705	730	670	700	670	845	795	840	800
6	700	670	800	760	710	670	700	545	850	830	860	815
7	700	400	795	740	720	675	---	---	840	825	840	770
8	455	380	780	650	745	685	---	---	840	800	785	740
9	---	---	645	495	735	680	665	630	835	800	765	700
10	490	445	610	500	740	690	690	660	850	800	775	740
11	565	495	555	490	730	660	710	670	815	710	860	770
12	605	565	630	555	720	620	710	660	740	690	870	845
13	615	605	640	590	705	635	730	665	690	650	890	810
14	565	545	590	520	665	595	740	680	650	600	860	820
15	500	295	610	495	---	---	740	715	700	670	850	650
16	425	360	520	400	---	---	745	735	780	715	670	590
17	555	425	480	405	---	---	740	700	790	745	760	610
18	560	515	510	430	---	---	720	590	785	740	770	755
19	605	560	540	470	690	660	700	640	810	770	770	730
20	685	605	580	510	710	685	690	655	865	785	750	700
21	710	560	600	530	715	505	690	610	880	830	750	710
22	590	550	620	570	715	520	700	630	865	845	770	720
23	570	495	615	565	720	715	720	660	840	770	775	750
24	550	455	620	550	720	680	720	640	835	785	770	750
25	630	530	625	550	685	650	740	555	800	765	770	610
26	650	570	620	590	660	630	745	720	805	790	610	410
27	635	580	660	630	690	650	775	660	805	780	485	400
28	670	620	705	660	725	710	790	730	800	730	530	485
29	690	635	775	665	725	600	800	765	755	725	530	500
30	705	645	775	570	710	630	820	780	760	650	500	445
31	---	---	680	620	---	---	830	785	720	650	---	---
MONTH	710	295	800	400	745	505	830	545	880	600	890	400
YEAR	960	295										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.8	2.3	8.6	4.0	7.3	6.1	9.9	8.3	12.0	7.6	7.9	7.3
2	3.1	2.4	9.1	4.4	7.7	6.3	9.8	8.5	10.9	7.6	7.5	7.1
3	3.8	3.0	7.6	4.1	7.6	6.6	10.4	7.5	12.5	4.9	---	---
4	3.9	3.7	7.9	4.5	7.6	7.2	---	---	6.5	3.6	---	---
5	4.4	3.8	8.3	5.8	7.5	6.7	---	---	14.5	5.9	---	---
6	4.7	4.2	6.7	5.8	7.3	6.0	---	---	15.0	13.0	---	---
7	4.8	4.6	7.8	6.2	7.7	5.9	11.3	9.5	13.1	6.3	---	---
8	5.1	4.7	9.6	6.6	7.8	6.2	10.8	9.2	11.0	5.9	8.7	8.0
9	4.9	4.7	7.3	5.0	6.8	5.9	10.7	8.9	11.0	7.2	8.9	8.3
10	4.7	4.6	7.4	5.0	6.4	5.9	9.5	7.9	9.5	6.3	9.0	8.4
11	4.6	4.2	7.6	4.5	6.8	6.0	9.5	8.3	8.8	7.9	8.8	8.4
12	4.2	4.0	7.0	4.4	6.8	5.9	9.8	7.5	8.7	8.1	8.6	8.0
13	4.1	4.0	7.4	4.3	7.1	6.3	8.2	6.2	8.3	7.8	8.4	6.7
14	5.4	2.0	8.4	4.5	6.7	6.3	8.8	6.8	9.0	7.7	8.8	7.1
15	4.5	2.1	8.9	4.4	---	---	8.8	5.1	8.6	7.7	9.3	8.8
16	3.8	2.0	8.5	4.0	---	---	8.0	4.7	8.1	7.6	9.6	9.3
17	3.5	2.2	9.3	4.0	---	---	10.7	7.5	8.3	7.6	9.9	9.4
18	3.8	2.7	8.4	4.1	---	---	10.1	8.6	7.9	7.1	10.2	9.8
19	5.1	2.8	6.2	4.1	---	---	8.6	7.7	7.7	7.5	10.3	9.4
20	7.9	3.2	5.7	3.9	8.3	8.0	8.2	6.6	8.2	7.7	9.5	8.9
21	6.0	3.8	6.5	5.0	8.1	6.9	7.9	7.4	8.2	7.9	9.0	8.7
22	4.6	3.4	8.4	4.8	8.4	7.4	7.8	7.3	8.3	8.1	9.2	8.4
23	4.5	3.0	7.7	6.0	7.6	6.5	7.8	7.0	8.9	8.3	9.5	9.2
24	4.8	3.1	7.2	5.6	8.5	8.1	7.8	4.7	9.1	8.9	9.9	9.3
25	4.7	3.0	7.6	5.4	8.4	7.3	8.7	5.7	9.2	8.4	---	8.9
26	5.0	2.8	7.5	5.7	7.5	7.0	9.7	8.1	9.3	8.9	9.4	9.0
27	5.4	2.9	6.4	5.5	7.6	5.8	8.5	6.0	9.0	8.7	9.0	8.8
28	5.8	3.2	7.6	5.6	7.7	6.1	7.3	6.2	8.8	8.5	8.9	8.5
29	6.6	3.3	6.6	5.9	8.1	6.9	7.8	6.0	8.6	7.9	8.6	8.0
30	6.8	3.2	6.3	5.7	---	---	7.5	6.1	---	---	8.6	8.1
31	7.6	3.5	---	---	9.6	8.1	12.0	6.3	---	---	8.8	8.3
MONTH	7.9	2.0	9.6	3.9	9.6	5.8	12.0	4.7	15.0	3.6	10.3	6.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	7.6	7.4	7.8	7.3	11.4	3.6	7.8	4.2	6.8	2.2
2	8.8	8.5	7.5	7.2	8.0	7.2	---	---	6.9	2.8	4.1	1.0
3	8.8	8.4	7.2	6.7	8.1	7.1	11.2	4.5	5.0	2.1	1.1	0.6
4	8.4	8.0	6.9	6.5	8.0	6.3	8.2	5.2	3.9	1.9	1.2	0.5
5	8.0	7.6	8.3	6.5	9.3	6.0	6.4	4.4	5.0	2.1	8.7	0.4
6	7.7	7.4	8.5	6.0	9.2	6.6	6.5	4.8	4.3	2.5	8.8	2.9
7	8.0	6.8	9.2	5.6	11.7	6.9	6.0	5.0	5.0	2.7	9.5	3.4
8	8.1	8.0	7.8	6.3	11.8	7.4	---	---	5.6	2.6	5.6	2.4
9	---	---	---	---	10.7	6.8	7.3	4.5	5.0	2.3	6.9	2.0
10	8.9	8.5	---	---	13.1	7.0	8.3	4.5	6.5	2.3	5.4	2.0
11	8.6	8.0	9.2	5.7	12.9	7.7	9.2	4.2	7.4	1.9	8.8	2.0
12	8.1	7.7	---	---	11.9	7.4	10.7	4.5	5.2	2.6	7.3	2.6
13	7.8	7.5	---	---	9.6	6.0	12.8	5.2	4.6	2.5	3.1	1.6
14	7.5	7.0	---	---	6.6	4.1	14.9	4.2	4.9	1.7	3.1	1.7
15	8.4	7.8	---	---	---	---	9.7	3.2	3.3	1.1	3.9	1.5
16	8.2	7.9	---	---	---	---	3.2	1.2	5.1	1.2	3.2	2.2
17	9.4	7.9	---	---	---	---	7.4	1.1	5.6	1.4	3.7	2.2
18	9.2	8.8	---	---	---	---	9.8	3.4	7.7	1.6	6.0	2.7
19	8.9	8.8	---	---	---	---	8.6	3.1	8.7	2.1	5.0	3.1
20	8.9	8.6	---	---	---	---	10.3	3.5	9.7	2.1	7.8	3.2
21	9.0	8.6	---	---	---	---	8.4	3.2	10.1	3.3	8.9	3.8
22	9.5	9.0	---	---	6.4	5.5	8.3	2.7	6.1	3.2	8.8	3.8
23	12.2	9.4	---	---	6.0	4.6	7.1	2.4	7.8	1.8	7.9	3.8
24	---	---	---	---	6.5	4.7	7.5	1.5	6.6	1.9	4.5	2.8
25	---	---	---	---	7.4	4.9	7.8	1.5	4.9	1.7	3.5	1.4
26	8.6	8.1	---	---	6.2	4.4	9.0	4.5	7.9	1.3	4.0	3.4
27	8.5	8.0	---	---	6.5	4.5	7.3	3.6	4.6	2.6	3.9	3.3
28	8.2	8.0	---	---	6.5	4.7	4.9	2.9	5.2	2.3	4.3	3.0
29	8.0	7.6	---	---	7.8	4.3	5.9	3.0	7.9	2.6	5.4	3.9
30	7.9	7.6	---	---	7.0	3.8	8.4	2.9	9.2	3.1	4.5	3.7
31	---	---	---	---	---	---	9.5	3.5	9.0	3.8	---	---
MONTH	12.2	6.8	---	---	---	---	14.9	1.1	10.1	1.1	9.5	0.4
YEAR	15.0	0.4										

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03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.0	26.0	22.0	20.0	9.5	8.5	---	---	4.0	3.0	12.5	10.5
2	28.0	26.5	22.5	20.5	8.5	8.0	---	---	5.5	4.0	12.0	11.0
3	28.0	26.0	20.5	17.0	8.0	7.5	---	---	6.0	5.5	---	---
4	26.5	25.0	17.5	16.0	8.0	7.5	---	---	5.5	3.0	---	---
5	25.5	23.0	16.5	15.0	9.0	8.0	---	---	3.0	1.5	---	---
6	24.0	22.0	15.5	13.5	10.5	9.0	---	---	3.5	2.0	---	---
7	22.5	20.5	13.5	12.0	10.5	10.0	5.5	3.0	3.0	2.0	---	---
8	20.5	19.0	12.0	10.5	12.0	10.5	5.0	4.0	3.0	2.0	8.0	5.0
9	19.5	18.5	11.0	10.5	12.5	11.0	---	---	3.5	2.0	8.0	5.0
10	19.0	17.5	11.5	10.0	13.0	12.0	---	---	3.5	2.0	8.0	5.0
11	19.0	16.5	12.5	10.5	13.0	12.0	---	---	5.0	3.0	10.5	6.0
12	19.5	16.5	13.0	11.5	12.5	11.5	---	---	7.5	5.0	12.0	9.0
13	20.0	17.0	15.0	13.0	12.0	11.0	---	---	7.5	6.5	12.0	11.0
14	19.5	17.5	16.0	14.0	11.5	10.5	---	---	6.5	5.5	11.0	9.5
15	20.0	18.0	17.5	15.0	---	---	6.0	2.0	6.0	5.0	9.5	8.5
16	21.0	19.5	18.0	16.5	---	---	---	---	6.0	4.0	9.0	8.0
17	21.5	20.0	18.5	16.5	---	---	---	---	6.0	5.0	8.5	8.0
18	22.0	20.5	18.0	16.5	---	---	5.0	3.0	6.0	5.0	9.0	7.5
19	22.5	20.0	17.5	15.5	---	---	7.5	5.0	5.0	4.0	9.0	7.5
20	22.0	20.0	15.5	13.5	8.0	6.5	9.0	5.5	4.0	3.0	10.0	8.0
21	21.5	20.5	13.5	11.0	8.5	7.0	6.5	5.5	5.0	3.5	11.5	10.0
22	21.5	20.5	11.0	9.5	7.5	6.5	9.0	6.0	5.5	4.5	11.5	9.0
23	21.5	20.5	10.0	8.5	7.5	6.5	9.5	9.0	5.5	5.0	9.0	7.0
24	21.5	20.5	9.5	8.5	8.5	7.5	10.5	9.0	6.0	5.0	7.5	6.5
25	21.5	20.0	10.0	9.0	9.5	8.0	9.0	6.5	6.0	6.0	7.0	6.5
26	21.5	20.5	9.5	9.0	11.0	9.0	6.5	5.0	6.5	6.0	8.5	6.5
27	21.5	20.0	10.0	9.0	12.0	10.0	5.0	4.0	7.5	5.5	8.5	8.0
28	21.0	20.0	10.0	10.0	12.0	9.5	4.5	3.5	9.0	6.0	10.0	8.0
29	21.0	20.0	10.0	9.5	10.0	8.5	4.0	3.5	11.5	8.0	10.5	10.0
30	22.0	20.0	10.0	9.0	---	---	4.0	3.0	---	---	11.0	9.0
31	22.0	20.0	---	---	---	---	3.5	2.0	---	---	11.0	9.0
MONTH	28.0	16.5	22.5	8.5	---	---	---	---	11.5	1.5	12.5	5.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.5	17.0	16.0	19.5	17.0	25.0	23.0	27.5	26.5	28.0	26.5
2	9.5	9.0	19.0	16.5	20.0	18.0	---	---	27.5	26.5	28.0	26.0
3	10.0	8.0	19.0	18.0	21.5	19.0	---	---	27.5	26.5	26.0	24.0
4	11.0	9.5	19.5	18.0	23.5	21.0	---	---	27.0	26.0	25.0	24.0
5	13.0	10.0	19.5	18.0	23.5	22.0	23.0	22.5	27.0	25.5	26.0	24.0
6	15.0	12.0	20.0	18.5	23.5	22.5	22.5	21.0	26.5	25.5	26.0	24.0
7	15.0	7.5	20.0	19.0	24.5	22.5	22.0	21.0	26.0	25.5	26.5	24.0
8	7.5	7.0	20.0	18.0	23.5	22.5	---	---	25.5	24.5	26.0	24.5
9	---	---	18.0	15.0	23.5	22.0	24.0	22.0	25.5	24.0	26.5	24.0
10	7.5	6.0	15.0	14.0	24.0	23.0	24.5	23.0	25.5	24.0	26.0	23.5
11	11.0	7.5	15.5	13.5	25.0	22.5	25.5	24.0	26.0	24.5	26.0	23.5
12	14.0	11.0	17.0	15.0	25.0	23.5	27.0	24.5	27.0	25.0	26.5	24.5
13	14.5	14.0	17.0	16.5	24.0	22.0	27.5	26.0	28.0	26.0	27.0	25.5
14	16.0	14.5	17.5	15.5	22.0	22.0	28.0	26.5	28.5	26.5	27.5	26.5
15	18.0	15.5	18.0	17.0	---	---	27.5	26.0	28.0	26.5	27.0	26.0
16	15.5	15.0	17.0	16.0	---	---	26.0	25.5	28.0	26.0	26.5	25.5
17	15.0	14.5	16.5	15.5	---	---	26.5	25.0	29.0	27.0	26.0	25.0
18	15.5	14.5	19.0	16.5	---	---	27.5	25.5	30.0	27.5	27.5	25.0
19	15.5	15.0	21.0	18.5	26.0	24.5	29.5	26.0	30.0	28.0	27.0	24.0
20	16.0	15.0	21.5	20.0	25.0	24.0	27.0	26.0	29.0	28.0	26.0	25.0
21	15.0	12.5	22.5	20.5	24.5	22.5	---	---	29.0	27.5	26.0	25.0
22	12.5	12.0	22.5	21.5	22.0	20.5	---	---	28.5	27.5	25.0	24.0
23	12.5	11.5	23.5	21.5	20.5	18.5	---	---	29.0	25.0	25.0	24.0
24	12.5	12.0	24.0	22.0	18.5	18.0	---	---	28.0	28.0	25.0	24.0
25	13.5	12.0	25.0	23.0	19.0	17.0	---	---	28.5	27.5	25.5	24.0
26	14.0	12.0	25.0	23.5	21.0	18.0	---	---	28.5	28.0	23.5	22.0
27	15.0	13.0	24.5	23.5	22.5	20.0	28.0	25.5	28.0	26.5	22.5	22.0
28	15.0	14.0	24.5	23.0	23.0	22.0	27.5	26.5	27.0	25.5	22.0	21.0
29	16.0	14.5	24.5	23.0	23.0	22.0	26.5	26.0	27.5	26.0	21.0	21.0
30	16.5	15.5	22.5	21.5	24.0	22.0	27.0	25.5	27.5	26.0	21.0	19.0
31	---	---	21.5	19.0	---	---	27.5	26.5	28.0	26.0	---	---
MONTH	18.0	6.0	25.0	13.5	26.0	17.0	---	---	30.0	24.0	28.0	19.0
YEAR	30.0	1.5										

03276600 GREAT MIAMI RIVER AT ELIZABETHTOWN, OHIO

LOCATION.--Lat 39°09'11", long 84°47'38", Hamilton County, at Lost Bridge on Lawrenceburg Road, 0.6 mile southeast of Elizabethtown, 0.9 mile downstream from Whitewater River, and 5.4 miles upstream from mouth.

DRAINAGE AREA.--5,356 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1972.
Water temperatures: October 1956 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum daily, 922 micromhos Feb. 14; minimum daily, 434 micromhos Apr. 9.
Water temperatures: Maximum, 32.5°C July 24; minimum, 2.0°C Feb. 7.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT.										
04...	1500	--	--	284	0	92	52	.6	1.3	5.6
13...	1145	--	--	282	0	98	62	1.0	2.8	13
14...	1245	200	30	--	--	--	--	--	--	--
21...	1615	--	--	276	0	78	43	.5	1.7	7.4
NOV.										
06...	1730	--	--	306	0	91	53	.7	1.6	7.3
07...	1715	--	--	290	8	91	53	.7	1.7	7.4
10...	1515	180	130	--	--	--	--	--	--	--
18...	1815	--	--	310	0	86	60	.6	1.8	7.9
DEC.										
02...	1800	--	--	292	0	92	56	.6	3.6	16
09...	1830	--	--	264	0	86	50	.6	2.2	10
16...	1300	1300	300	--	--	--	--	--	--	--
29...	1600	--	--	184	0	53	22	.3	3.3	15
JAN.										
01...	1200	--	--	186	0	56	22	.4	6.2	27
06...	1400	320	120	--	--	--	--	--	--	--
07...	1800	--	--	272	0	78	40	.4	5.6	25
31...	1430	--	--	302	0	96	52	.5	6.3	28
FEB.										
05...	1500	--	--	258	22	91	64	.5	6.2	28
08...	1330	--	--	--	--	--	--	--	--	--
14...	1215	--	--	264	24	96	87	.6	5.6	25
21...	1200	--	--	252	0	74	45	.5	5.7	25
MAR.										
02...	1730	--	--	224	0	70	42	.5	3.9	17
08...	1500	--	--	241	0	78	38	.4	8.0	35
09...	1630	--	--	258	12	88	44	.4	7.0	31
10...	1300	180	80	--	--	--	--	--	--	--
APR.										
06...	1715	--	--	264	8	110	44	.4	4.9	22
09...	1830	--	--	154	0	48	22	.3	6.3	28
18...	1400	480	220	--	--	--	--	--	--	--
28...	1630	--	--	222	10	69	28	.4	5.3	23
MAY										
08...	1800	--	--	182	8	53	22	.3	2.8	12
12...	1515	160	200	--	--	--	--	--	--	--
15...	1845	--	--	250	0	59	24	.3	4.5	20
23...	1530	--	--	298	0	84	36	.4	4.0	18
JUNE										
05...	1830	--	--	220	30	80	35	.4	4.3	19
08...	--	220	77	--	--	--	--	--	--	--
11...	1045	--	--	298	0	84	42	.4	4.1	18
18...	1100	--	--	224	0	60	28	.3	9.6	42
JULY										
09...	1730	--	--	212	14	79	33	.4	4.8	21
21...	1915	--	--	284	0	83	38	.4	2.4	10
25...	1255	40	26	--	--	--	--	--	--	--
31...	1845	--	--	288	0	95	53	.5	2.4	10
AUG.										
10...	1400	110	40	--	--	--	--	--	--	--
23...	1730	--	--	294	0	100	60	.5	2.5	11
26...	1830	--	--	276	0	96	58	.5	3.0	13
31...	1845	--	--	234	16	87	50	.4	2.1	9.4
SEP.										
06...	1830	--	--	224	16	92	56	1.0	3.7	16
12...	2330	--	--	256	8	96	61	1.0	4.3	19
15...	1330	130	77	--	--	--	--	--	--	--
28...	1645	--	--	192	0	59	30	.8	3.5	15

03276600 GREAT MIAMI RIVER AT ELIZABETHTOWN, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum daily, 1,090 micromhos Jan. 6, 1964; minimum daily, 296 micromhos Jan. 28, 1962.
Water temperatures: Maximum, 32.5°C July 24, 1972; minimum, freezing point on several days during winter periods of most years.

REMARKS.--Samples for iron and manganese filtered clear when collected. Daily samples were collected at this station and samples were selected for analysis on the following basis: (1) Maximum daily specific conductance for each month, (2) minimum daily specific conductance for each month, (3) median daily specific conductance for each month, and (4) special sample each month to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.										
04...	.84	2.6	502	320	87	756	7.6	26.0	--	--
13...	.62	1.9	498	320	88	812	8.2	17.0	--	--
14...	--	--	--	--	--	--	--	19.5	--	--
21...	.70	2.2	430	310	84	701	7.7	20.0	--	--
NOV.										
06...	.72	2.2	490	340	88	796	7.7	12.0	--	--
07...	.73	2.2	492	340	88	754	8.4	12.0	--	--
10...	--	--	--	--	--	--	--	9.5	13.8	120
18...	.79	2.4	512	350	96	830	7.7	12.0	--	--
DEC.										
02...	1.1	3.4	470	330	90	783	7.7	7.0	--	--
09...	1.2	3.8	438	310	93	726	7.5	8.0	--	--
16...	--	--	--	--	--	--	--	12.0	7.4	68
29...	.96	3.0	302	230	79	475	7.4	7.0	--	--
JAN.										
01...	.50	1.5	354	240	88	483	8.1	6.0	--	--
06...	--	--	--	--	--	--	--	5.0	11.4	89
07...	.43	1.3	478	340	120	698	7.6	5.0	--	--
31...	.67	2.1	540	370	120	808	7.5	3.0	--	--
FEB.										
05...	.62	1.9	504	360	110	819	8.5	4.0	--	--
08...	--	--	--	--	--	--	--	.0	11.0	75
14...	.85	2.6	620	380	120	922	8.7	6.0	--	--
21...	.57	1.8	478	310	100	684	7.5	5.0	--	--
MAR.										
02...	.57	1.8	402	280	96	600	8.2	10.0	--	--
08...	.30	.91	440	320	120	664	7.6	6.0	--	--
09...	.48	1.5	466	350	120	732	8.6	10.0	--	--
10...	--	--	--	--	--	--	--	7.0	10.0	82
APR.										
06...	.30	.92	408	250	20	725	8.5	15.0	--	--
09...	.60	1.8	238	200	74	434	8.0	5.0	--	--
18...	--	--	--	--	--	--	--	17.5	9.0	94
28...	.39	1.2	334	290	91	585	8.4	15.0	--	--
MAY										
08...	.72	2.2	300	230	68	479	8.3	22.0	--	--
12...	--	--	--	--	--	--	--	18.0	8.8	93
15...	.17	.52	370	290	84	588	7.6	18.5	--	--
23...	.14	.45	446	350	110	722	8.1	25.0	--	--
JUNE										
05...	.43	1.3	438	330	100	693	8.4	26.0	--	--
08...	--	--	--	--	--	--	--	28.5	10.2	131
11...	.58	1.8	480	360	120	759	8.2	22.0	--	--
18...	.60	1.8	400	290	110	599	7.5	24.0	--	--
JULY										
09...	.47	1.4	408	300	100	641	8.5	25.0	--	--
21...	.29	.89	428	330	97	703	7.6	32.0	--	--
25...	--	--	--	--	--	--	--	28.5	5.3	68
31...	.39	1.2	486	340	100	774	7.9	27.0	--	--
AUG.										
10...	--	--	--	--	--	--	--	24.5	8.8	105
23...	.65	2.0	496	350	110	813	7.8	30.0	--	--
26...	.73	2.2	490	320	94	782	7.6	30.0	--	--
31...	.080	.26	444	310	91	714	8.5	30.0	--	--
SEP.										
06...	.60	1.8	474	320	110	726	8.6	25.0	--	--
12...	.66	2.0	502	340	120	782	8.3	23.5	--	--
15...	--	--	--	--	--	--	--	26.0	6.2	76
28...	1.5	4.5	328	230	72	512	7.9	21.0	--	--

03276600 GREAT MIAMI RIVER AT ELIZABETHTOWN, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT BETWEEN 1045 AND 2330)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	754	786	779	483	810	606	713	654	646	709	778	715
2	757	790	783	484	810	600	713	655	659	709	775	720
3	757	792	783	635	806	606	701	678	682	706	762	721
4	756	810	779	632	795	618	699	715	692	706	762	706
5	747	810	739	630	819	620	701	706	693	654	762	706
6	757	796	730	688	832	614	725	484	712	644	766	726
7	766	754	727	698	830	624	440	489	711	651	762	737
8	766	781	721	701	832	664	444	479	750	654	782	736
9	797	785	726	689	830	732	434	491	756	641	782	736
10	797	800	745	691	832	729	442	479	757	693	776	712
11	797	810	737	656	910	728	597	504	759	694	775	775
12	749	810	747	643	908	730	589	519	756	687	775	782
13	812	806	745	663	908	728	594	544	668	694	786	---
14	810	788	740	659	922	720	491	554	667	701	803	---
15	812	788	591	654	740	720	487	588	667	700	780	779
16	734	826	590	649	738	631	487	578	664	710	801	779
17	733	818	595	650	737	633	493	582	602	703	788	779
18	736	830	595	785	737	633	492	553	599	686	789	761
19	729	820	594	773	684	629	602	553	659	701	789	761
20	734	806	686	785	684	633	602	645	661	698	789	761
21	701	804	683	771	684	636	603	645	662	703	791	759
22	702	824	674	787	722	636	602	646	649	703	811	757
23	702	824	686	762	724	635	506	722	754	747	813	723
24	701	824	679	767	721	712	504	710	753	742	811	721
25	786	764	749	766	776	712	504	706	753	735	780	723
26	729	772	746	757	778	712	504	694	740	735	782	723
27	786	772	746	757	778	711	585	706	698	729	778	513
28	784	770	477	758	785	709	585	691	699	712	782	512
29	736	790	475	757	787	706	584	703	699	721	782	513
30	791	794	490	748	---	709	652	686	695	713	720	535
31	791	---	483	808	---	709	---	702	---	774	714	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT BETWEEN 1045 AND 2330)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	20.0	8.0	6.0	4.0	10.0	11.0	18.0	18.5	21.0	27.0	29.0
2	27.0	20.0	7.0	6.0	4.0	10.0	11.0	18.0	18.0	20.0	27.0	27.0
3	27.0	20.0	7.0	6.0	5.0	9.0	11.0	19.0	20.0	22.0	26.0	26.0
4	26.0	19.0	7.0	5.0	5.0	4.0	11.0	20.0	21.0	23.0	27.0	24.0
5	26.0	14.0	8.0	5.0	4.0	4.0	11.0	20.0	26.0	24.0	26.0	24.5
6	22.0	12.0	9.0	4.0	5.0	5.0	15.0	21.0	26.0	24.0	27.0	25.0
7	23.0	12.0	9.0	5.0	2.0	5.0	15.0	22.0	26.0	24.5	21.0	26.0
8	22.0	9.0	9.0	6.0	2.5	6.0	6.0	22.0	24.0	24.5	26.0	25.0
9	17.0	9.0	8.0	5.0	3.5	10.0	5.0	22.0	22.0	25.0	27.0	25.0
10	17.0	8.0	8.0	5.0	3.0	11.0	6.0	22.0	21.0	27.0	24.5	25.0
11	17.0	14.0	9.0	6.0	3.0	13.0	10.0	16.0	22.0	28.0	25.0	23.5
12	18.0	15.0	10.0	6.0	5.0	13.0	15.0	16.0	22.0	28.0	27.0	23.5
13	17.0	14.0	10.0	5.0	8.0	13.0	15.0	18.5	23.0	28.0	28.0	---
14	17.0	15.0	10.0	3.0	6.0	11.0	15.0	18.0	25.0	28.0	28.0	---
15	17.0	15.0	7.0	3.0	6.0	11.0	16.0	18.5	25.0	27.0	27.0	24.0
16	18.0	14.0	5.0	3.0	6.0	9.0	16.0	19.0	26.0	27.0	27.5	26.0
17	19.0	14.0	5.0	5.0	6.0	9.0	16.0	19.5	23.5	29.5	28.0	24.0
18	20.0	12.0	5.0	6.0	6.0	9.0	16.0	20.0	24.0	30.0	29.0	25.0
19	20.0	11.0	5.0	6.0	4.0	9.0	16.0	20.0	25.0	31.0	30.0	25.0
20	20.0	11.0	5.0	7.0	4.0	8.5	15.0	21.0	26.0	31.0	30.0	24.5
21	20.0	10.0	6.0	7.0	5.0	11.0	15.0	21.0	26.0	32.0	30.0	24.0
22	20.0	6.0	5.0	7.0	5.0	9.0	15.0	22.0	25.0	31.0	30.0	24.0
23	21.0	7.0	5.0	6.0	5.0	8.5	14.5	25.0	19.0	31.0	30.0	24.0
24	20.0	6.0	6.0	7.0	5.0	9.0	14.0	26.0	19.0	32.5	31.0	24.5
25	20.0	7.0	7.0	7.0	6.0	9.0	14.0	26.0	20.0	28.5	30.0	24.0
26	20.0	8.0	9.0	7.0	6.0	9.5	14.5	26.0	23.0	29.0	28.5	25.0
27	20.0	8.0	7.0	6.0	6.0	9.0	15.0	26.0	23.5	28.5	28.0	23.0
28	20.0	8.0	7.0	4.0	8.0	10.0	15.0	24.0	21.0	28.0	28.0	21.0
29	21.0	8.0	7.0	3.0	10.0	10.0	15.0	23.5	22.0	26.0	30.0	21.0
30	21.0	8.0	7.0	3.0	---	10.0	17.0	24.0	23.0	27.0	30.0	17.0
31	20.0	---	6.0	3.0	---	12.0	---	24.5	---	27.0	30.0	---

STREAMS TRIBUTARY TO LAKE ERIE

04181050 ST. MARYS RIVER AT WILSHIRE, OHIO

LOCATION.--Lat 40°45'07", long 84°47'36", in SW 1/4 NE 1/4 sec.30, T.3 S., R.1 E., First principal meridian at bridge on New York, Chicago, and St. Louis Railroad, at northeast edge of Wilshire, 1 mile upstream from Ohio-Indiana State line.

DRAINAGE AREA.--435 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

REMARKS.--Samples collected bi-monthly by the Indianapolis, Indiana district office as part of the Environmental Protection Agency national network.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL RESIDUE (MG/L)
OCT. 05...	1115	--	--	1.1	.30	444	110	554
NOV. 29...	1200	--	--	.56	.44	548	38	586
JAN. 31...	1500	6.2	.17	.93	.21	518	50	568
APR. 03...	1130	--	--	1.6	.27	398	114	512
MAY 30...	1230	--	--	2.1	.21	470	162	632
AUG. 22...	1430	--	--	2.2	.46	426	144	570

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	COLOR (PLATINUM-COBALT UNITS)	IMMEDIATE COLIFORM (COL. PER 100 ML)
OCT. 05...	700	7.5	20.5	25.0	5.5	60	25	26000
NOV. 29...	900	9.3	4.5	5.0	10.0	77	10	5800
JAN. 31...	850	9.2	.5	-1.0	12.6	88	10	1400
APR. 03...	650	7.4	6.0	9.0	11.6	93	15	8800
MAY 30...	700	8.3	19.0	23.5	7.6	81	20	33000
AUG. 22...	670	7.8	26.0	29.5	6.7	82	20	23000

04183500 MAUMEE RIVER AT ANTWERP, OHIO

LOCATION.--Lat 41°11'56", long 84°44'40", in sec.22, T.3 N., R.1 E., Paulding County, at gaging station on left bank 425 ft downstream from bridge on State Highway 49, 1 mile north of Antwerp, 7 miles downstream from Indiana State line, and 10 miles upstream from Marie DeLarme Creek.

DRAINAGE AREA.--2,129 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.									
05...	1300	570	--	--	--	--	.7	--	2.8
18...	1515	140	--	--	--	--	--	--	4.4
NOV.									
01...	1415	259	--	--	--	--	--	--	5.6
16...	1308	164	--	--	--	--	--	--	2.9
29...	1330	190	--	--	--	--	--	--	2.1
DEC.									
01...	1100	259	--	--	--	--	--	--	--
14...	1345	1960	--	--	--	--	--	--	8.0
JAN.									
03...	1430	2710	--	--	--	--	.3	--	7.8
18...	1330	1140	--	--	--	--	--	--	6.0
20...	1130	1290	--	--	110	67	--	--	4.4
31...	1600	2150	--	--	--	--	--	--	6.0
FEB.									
15...	1100	634	--	--	--	--	--	--	3.2
MAR.									
06...	1315	2260	--	--	--	--	--	--	7.0
22...	0930	3620	--	--	77	22	--	--	7.0
22...	1340	3730	--	--	--	--	--	--	6.0
APR.									
03...	1400	1720	--	--	--	--	.4	--	7.1
18...	1200	10400	--	--	--	--	--	--	5.7
MAY									
02...	1345	2120	--	--	--	--	--	--	--
02...	1500	2140	--	--	--	--	--	--	4.0
16...	1415	3270	--	--	--	--	--	--	3.9
30...	1430	810	--	--	--	--	--	--	2.6
JUNE									
13...	0930	364	--	--	--	--	--	--	4.5
21...	1130	444	--	--	--	--	.5	--	3.9
JULY									
05...	1920	682	--	--	120	49	--	--	3.2
18...	1130	3330	--	--	--	--	--	--	--
18...	1200	3300	--	--	--	--	--	.000	6.7
AUG.									
22...	--	--	--	--	--	--	--	--	--
22...	1235	430	--	--	--	--	--	.030	1.1
23...	1030	303	253	0	89	31	.5	--	1.5
SEP.									
19...	1430	4050	--	--	--	--	.3	.100	3.7

04183500 MAUMEE RIVER AT ANTWERP, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, water year 1966-67 (partial-record station); October 1969 to September 1972.
Water temperatures: October 1948 to September 1949.

REMARKS.--Samples collected bi-weekly by the Indianapolis, Indiana district office as part of the Environmental Protection Agency national network. Additional samples collected by the Columbus, Ohio district office, to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)
OCT.									
05...	--	.30	.40	--	--	--	392	76	468
18...	--	.51	1.3	--	--	--	474	22	496
NOV.									
01...	--	.00	.92	--	--	--	470	68	538
16...	--	.13	1.8	--	--	--	534	78	612
29...	--	.81	1.7	--	--	--	536	30	566
DEC.									
01...	--	--	--	--	--	--	--	--	--
14...	--	1.4	.41	--	--	--	418	84	502
JAN.									
03...	--	.60	.46	--	--	--	374	222	596
18...	--	1.3	.47	--	--	--	496	50	546
20...	20	--	--	--	340	--	--	--	--
31...	--	.27	.47	--	--	--	478	54	532
FEB.									
15...	--	.16	1.0	--	--	--	636	54	690
MAR.									
06...	--	2.7	.49	--	--	--	352	162	514
22...	31	--	--	--	240	--	--	--	--
22...	--	1.8	.40	--	--	--	364	114	478
APR.									
03...	--	2.4	.37	--	--	--	440	50	490
18...	--	4.0	.71	--	--	--	250	632	882
MAY									
02...	--	--	--	--	--	--	--	--	--
02...	--	1.5	.53	--	--	--	398	104	502
16...	--	1.9	.22	--	--	--	320	308	628
30...	--	2.0	.52	--	--	--	468	82	550
JUNE									
13...	--	.32	.48	--	--	--	520	84	604
21...	--	1.1	.58	--	--	--	442	78	520
JULY									
05...	14	--	--	--	340	--	--	--	--
18...	--	--	--	--	--	--	--	--	--
18...	--	3.7	.59	--	--	--	244	776	1020
AUG.									
22...	--	--	--	--	--	--	--	--	--
22...	--	1.8	.36	--	--	--	408	60	468
23...	6.6	--	.42	1.3	300	92	390	--	--
SEP.									
19...	--	2.7	.61	--	--	--	288	206	494

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04183500 MAUMEE RIVER AT ANTWERP, OHIO--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	COLOR (PLAT-INUM-COBALT UNITS)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT.								
05...	700	7.8	21.5	23.0	5.8	65	20	11000
18...	750	8.3	17.5	18.0	8.2	85	10	--
NOV.								
01...	750	8.3	13.0	21.0	--	--	15	4300
16...	851	8.8	10.0	12.5	14.2	126	15	--
29...	925	8.5	3.5	.5	13.6	100	10	800
DEC.								
01...	905	--	2.5	--	--	--	--	--
14...	650	8.6	5.0	.0	11.2	88	30	--
JAN.								
03...	575	8.5	5.0	10.5	12.6	98	25	11000
18...	780	9.3	.0	6.5	12.8	88	20	--
20...	798	8.2	1.0	--	--	--	--	--
31...	800	8.8	.0	-1.0	13.4	92	20	760
FEB.								
15...	900	7.5	.5	3.0	9.8	68	10	--
MAR.								
06...	600	8.6	1.5	-3.0	13.8	98	25	7130
22...	504	8.2	6.5	--	--	--	--	--
22...	425	8.2	8.0	1.5	11.2	94	20	--
APR.								
03...	660	8.0	7.0	8.0	12.0	98	20	5800
18...	375	7.8	14.5	21.0	8.2	80	35	--
MAY								
02...	546	--	17.0	--	--	--	--	--
02...	554	8.4	16.5	22.0	8.8	90	20	59000
16...	495	8.6	18.5	21.0	8.2	87	30	--
30...	825	8.6	22.0	20.0	7.1	81	20	1000
JUNE								
13...	750	8.2	23.0	23.5	7.9	91	20	--
21...	669	--	--	--	--	--	15	--
JULY								
05...	792	7.9	21.5	--	--	--	--	--
18...	360	7.7	28.0	31.0	6.3	--	--	61300
18...	--	--	28.0	31.0	6.3	80	35	--
AUG.								
22...	525	8.1	26.5	28.5	7.6	94	--	95000
22...	--	--	--	--	--	--	20	--
23...	637	8.1	25.0	--	--	--	--	--
SEP.								
19...	414	7.7	22.0	21.0	6.5	74	50	160000

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
OCT.											
05...	4	260	2	4	13	16	2	--	0	60	.01
NOV.											
01...	--	--	--	--	--	--	--	6	--	--	--
JAN.											
03...	14	240	6	0	16	12	7	2	1	90	.01
APR.											
03...	5	140	3	30	16	9	4	3	1	100	.01
JUNE											
21...	6	200	2	0	12	12	4	7	0	110	.00
SEP.											
19...	11	100	1	--	13	12	0	3	1	60	.01

04184100 MAUMEE RIVER AT DEFIANCE, OHIO

LOCATION.--Lat 41°16'43", long 84°23'07", Defiance County, at waterworks on right bank at Defiance, about 300 ft upstream from Tiffin River, and 1.8 miles upstream from Auglaize River.

DRAINAGE AREA.--2,316 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1972.
Water temperatures: January 1966 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,050 micromhos Feb. 20; minimum, 270 micromhos Sept. 16.
Water temperatures: Maximum, 30.0°C Aug. 19; minimum, freezing point on many days during January to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.								
01...	0750	162	0	70	34	.5	3.2	14
13...	1745	--	--	--	--	--	--	--
25...	0745	251	0	120	55	.8	3.2	14
NOV.								
01...	0750	214	0	86	41	.5	4.2	19
26...	0800	298	0	120	62	.9	2.7	12
DEC.								
01...	0800	281	0	130	71	.9	2.6	11
17...	0755	123	0	58	22	.4	9.1	40
JAN.								
03...	0800	132	0	73	24	.2	8.1	36
24...	0745	202	6	110	48	.3	7.4	33
FEB.								
02...	0815	214	0	120	43	.4	4.4	19
14...	0800	262	12	150	66	.5	4.2	18
MAR.								
01...	0800	196	8	110	50	.4	4.7	21
22...	1230	146	0	76	22	.2	8.2	36
APR.								
21...	0800	144	0	60	17	.2	5.6	25
26...	1020	118	0	44	9.7	.3	3.9	17
MAY								
17...	1415	190	0	70	20	.3	3.2	14
30...	0950	232	10	100	30	.3	3.0	13
JUNE								
07...	1530	--	--	--	--	--	--	--
19...	1300	202	0	72	25	.4	5.0	22
30...	0800	238	12	120	46	.6	1.9	8.2
JULY								
07...	1250	246	14	125	47	.6	3.2	14
18...	0800	118	0	38	12	.3	8.3	37
AUG.								
04...	0975	257	0	88	37	.5	1.7	7.4
16...	0900	163	6	91	35	.4	1.3	5.6
SEP.								
11...	0800	216	12	110	48	.7	1.8	8.2
15...	0800	125	0	43	11	.2	2.7	12

04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance: Maximum, 1,350 micromhos Jan. 24, 1970; minimum, 210 micromhos Jan. 30, 1969, Feb. 8, 9, 1971.
Dissolved oxygen (1966-68, 1969-70): Maximum, 15.0 mg/l on many days during 1966 to 1968; minimum, 0.2 mg/l Aug. 23, 1966.
Water temperatures: Maximum, 32.0°C July 3, 1966; minimum, freezing point on many days during winter months of 1966 to 1972.

REMARKS.--Continuous water-quality recorder operated since January 1966. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
01...	320	200	67	524	7.3	--	--	--
13...	--	--	--	--	--	11	1.3	10
25...	500	300	94	793	7.4	--	--	--
NOV.								
01...	468	300	120	668	7.3	--	--	--
26...	574	360	120	857	7.5	--	--	--
DEC.								
01...	582	350	120	861	8.1	--	--	--
17...	316	200	99	429	7.8	--	--	--
JAN.								
03...	324	220	110	471	7.2	--	--	--
24...	430	320	140	719	8.4	--	--	--
FEB.								
02...	518	330	150	730	7.4	--	--	--
14...	664	410	180	956	8.5	--	--	--
MAR.								
01...	480	290	120	738	8.4	--	--	--
22...	340	230	110	497	7.7	--	--	--
APR.								
21...	300	210	92	443	8.2	--	--	--
26...	182	160	64	327	7.2	--	--	--
MAY								
17...	320	240	84	500	7.4	--	--	--
30...	434	330	120	663	8.5	--	--	--
JUNE								
07...	--	--	--	--	--	--	<.5	8.0
19...	362	260	94	562	7.5	--	--	--
30...	494	340	120	766	8.5	--	--	--
JULY								
07...	516	370	140	803	8.7	--	--	--
18...	234	160	64	356	8.2	--	--	--
AUG.								
04...	442	310	99	680	8.0	--	--	--
16...	336	230	86	556	8.6	--	--	--
SEP.								
11...	448	300	100	713	8.6	--	--	--
15...	178	140	38	292	7.5	--	--	--

04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	610	460	690	660	860	850	660	570	---	---	770	670
2	490	460	710	690	880	850	640	460	---	---	680	510
3	540	470	730	710	850	830	520	470	---	---	800	580
4	560	530	750	730	850	830	560	510	---	---	830	510
5	600	560	760	740	870	850	560	530	---	---	510	500
6	610	600	760	750	850	650	530	510	---	---	570	510
7	630	610	770	750	850	780	540	510	---	---	570	550
8	680	630	780	770	830	740	570	530	---	---	550	520
9	660	650	800	780	900	610	610	570	---	---	530	510
10	650	620	820	800	610	470	620	600	---	---	540	520
11	650	620	850	820	570	460	690	610	940	930	590	540
12	670	650	860	840	550	530	680	620	980	920	670	590
13	660	650	850	840	580	540	620	540	950	930	650	500
14	660	650	850	840	600	560	610	550	970	940	610	500
15	650	640	840	840	580	500	680	610	960	780	---	---
16	680	650	840	820	610	450	700	670	890	870	---	---
17	700	680	830	770	450	430	740	700	950	860	---	---
18	690	680	780	740	450	430	760	730	1000	940	---	---
19	710	690	780	730	490	440	740	710	1040	1000	---	---
20	730	710	810	770	530	480	730	720	1050	960	---	---
21	730	720	830	810	540	530	720	710	970	890	---	---
22	730	710	850	830	530	520	810	720	890	860	520	490
23	730	720	860	840	540	520	760	710	870	830	---	---
24	770	730	850	840	570	530	---	---	830	780	---	---
25	610	690	860	850	630	560	---	---	820	790	---	---
26	800	690	860	850	660	610	---	---	830	810	---	---
27	750	610	860	830	690	650	---	---	810	790	---	---
28	610	590	840	830	710	690	---	---	810	780	---	---
29	610	590	860	830	760	700	---	---	800	760	---	---
30	640	610	870	860	770	540	---	---	---	---	---	---
31	660	640	---	---	670	550	---	---	---	---	---	---
MONTH	810	460	870	660	900	430	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	530	490	690	665	710	675	630	620	590	580
2	---	---	540	510	675	625	680	645	635	625	600	590
3	---	---	585	510	665	625	685	670	665	620	615	595
4	---	---	600	585	590	515	730	685	690	640	625	610
5	---	---	610	600	665	590	745	725	675	615	640	620
6	---	---	630	610	680	665	740	690	670	650	650	635
7	---	---	635	620	700	680	720	670	680	530	655	640
8	---	---	630	590	705	690	705	670	535	480	670	650
9	---	---	600	580	700	685	700	585	670	510	660	640
10	---	---	620	600	690	670	615	575	710	655	690	660
11	---	---	625	615	685	640	600	590	705	670	700	690
12	---	---	630	620	665	585	590	580	680	670	690	570
13	---	---	660	630	655	625	585	500	670	630	690	540
14	---	---	640	585	665	650	600	555	630	590	630	290
15	---	---	640	595	655	625	600	540	595	550	370	295
16	---	---	650	420	650	485	630	560	565	550	300	270
17	---	---	505	420	545	425	605	510	590	560	345	300
18	---	---	510	500	560	545	510	310	595	500	380	325
19	385	375	520	500	560	550	375	310	500	460	420	380
20	430	385	560	520	570	555	440	375	525	500	480	400
21	440	420	590	560	590	570	450	365	580	520	520	480
22	420	360	590	550	610	590	365	350	580	535	490	470
23	360	350	555	540	650	610	390	350	630	580	490	460
24	350	340	580	555	665	650	450	390	630	575	510	490
25	350	330	600	585	670	665	480	450	625	580	525	510
26	360	330	620	600	705	665	515	480	640	600	525	480
27	380	360	640	620	685	640	540	515	690	620	535	465
28	440	380	640	630	690	675	560	540	625	555	530	490
29	500	440	650	640	745	690	590	560	570	555	490	420
30	550	500	650	620	760	710	610	590	580	560	440	410
31	---	---	675	645	---	---	625	610	580	565	---	---
MONTH	---	---	675	420	760	425	745	310	710	460	700	270
YEAR	1050	270										

04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	15.0	12.2	---	---	---	---	12.3	12.2
2	---	---	---	---	15.0	15.0	---	---	---	---	12.2	11.8
3	---	---	---	---	15.0	14.2	---	---	---	---	12.4	10.9
4	---	---	11.2	9.6	15.0	13.7	---	---	---	---	13.0	11.0
5	---	---	11.9	10.1	13.8	10.8	12.2	11.5	---	---	13.8	13.0
6	---	---	11.5	10.1	11.4	10.6	11.8	11.5	---	---	14.3	13.8
7	---	---	11.4	9.7	11.0	10.5	11.9	11.7	---	---	14.4	14.2
8	---	---	12.0	10.9	12.4	10.9	11.9	11.8	---	---	14.3	14.2
9	---	---	11.7	11.1	11.7	8.3	12.0	11.7	---	---	14.4	14.2
10	---	---	11.5	10.4	9.9	9.4	11.8	11.5	---	---	14.4	14.2
11	---	---	11.7	10.5	10.1	9.7	11.6	11.5	9.9	9.7	14.3	14.1
12	---	---	11.6	10.7	10.4	9.4	11.7	11.5	9.8	9.6	14.1	13.6
13	---	---	11.3	10.5	11.1	10.4	11.6	11.3	9.7	9.4	13.6	13.4
14	---	---	11.2	10.0	12.0	11.1	11.6	11.2	9.4	9.2	13.4	12.6
15	---	---	10.7	9.7	12.2	11.9	11.9	11.6	10.4	9.2	---	---
16	---	---	11.4	9.3	12.0	11.0	11.9	11.7	9.3	9.0	---	---
17	---	---	---	10.4	11.7	11.4	11.7	11.6	9.4	9.2	---	---
18	---	---	---	---	12.6	11.7	11.8	11.5	9.6	9.2	---	---
19	---	---	11.2	10.2	---	---	11.5	11.0	9.9	9.4	---	---
20	---	---	12.3	10.2	---	---	11.0	10.7	10.6	9.9	---	---
21	---	---	12.7	11.0	---	---	10.7	10.5	10.9	10.6	---	---
22	---	---	13.8	11.9	---	---	10.6	10.3	11.8	10.9	---	---
23	---	---	14.5	13.0	---	---	10.5	10.3	12.5	11.8	---	---
24	---	---	13.2	12.5	---	---	---	---	11.8	11.6	---	---
25	---	---	13.8	12.4	---	---	---	---	12.0	11.6	---	---
26	---	---	14.9	13.3	---	---	---	---	12.0	11.8	---	---
27	---	---	14.0	12.4	---	---	---	---	12.1	11.9	---	---
28	---	---	12.8	11.3	---	---	---	---	12.1	11.8	---	---
29	---	---	11.3	9.4	---	---	---	---	12.3	11.8	---	---
30	---	---	12.2	9.4	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	14.9	9.3	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.9	8.4	7.0	6.8	9.7	9.1	10.5	7.5	7.0	6.0
2	---	---	8.7	7.6	6.9	6.7	10.1	9.7	9.5	7.0	6.1	5.6
3	---	---	8.4	7.6	7.0	6.7	10.7	10.1	9.4	5.7	6.6	6.0
4	---	---	8.9	7.8	7.0	6.7	11.3	10.7	9.4	4.3	6.9	5.9
5	---	---	9.4	8.9	7.0	6.8	11.8	11.3	7.7	4.0	6.9	6.0
6	---	---	9.7	9.0	6.8	6.7	13.0	9.6	8.6	7.4	7.1	6.1
7	---	---	9.5	9.0	7.3	6.7	9.6	6.6	8.1	5.2	7.0	6.3
8	---	---	9.6	9.1	7.4	7.2	7.9	5.4	5.9	5.1	6.9	6.2
9	---	---	11.1	9.0	7.5	7.3	6.7	4.6	6.5	5.9	6.7	6.0
10	---	---	11.4	10.5	7.6	7.4	6.5	4.8	7.1	5.6	6.9	6.0
11	---	---	10.5	9.6	7.7	7.4	6.5	4.7	8.7	6.5	7.3	6.4
12	---	---	9.6	9.2	7.6	7.5	6.3	4.5	10.4	7.6	7.2	6.5
13	---	---	9.4	8.6	7.6	7.3	5.7	4.2	10.0	8.6	7.2	6.6
14	---	---	8.6	7.8	7.4	7.2	5.4	4.0	8.6	8.2	7.0	6.4
15	---	---	8.2	7.0	7.3	7.2	4.2	3.4	8.4	8.2	6.9	6.1
16	---	---	7.3	7.0	7.5	7.3	4.2	3.8	8.8	8.1	7.1	6.3
17	---	---	7.3	7.1	7.6	7.5	4.1	3.4	11.8	8.7	7.4	6.8
18	---	---	7.1	7.0	7.6	7.4	4.7	4.2	15.0	8.2	7.1	6.5
19	7.6	7.2	7.0	6.9	7.5	7.2	4.9	4.7	8.3	7.6	6.8	6.5
20	8.0	7.6	7.0	6.9	7.5	7.2	4.8	3.9	15.0	7.2	7.0	6.2
21	8.4	7.9	7.0	6.8	7.7	7.5	4.9	4.3	15.0	6.7	6.5	5.8
22	9.0	8.4	6.9	6.8	7.9	7.8	4.9	4.5	10.3	7.1	7.1	5.5
23	9.2	8.9	6.9	6.7	8.1	7.9	4.7	4.6	7.8	7.4	6.3	6.1
24	9.3	9.2	6.8	6.6	8.2	8.1	4.8	4.6	7.5	7.0	6.7	6.2
25	9.3	9.3	6.8	6.7	8.2	7.9	4.8	4.5	7.4	6.6	6.7	6.3
26	9.4	9.3	7.0	6.7	7.9	7.7	5.1	4.7	7.6	6.6	6.8	6.4
27	9.4	9.3	7.0	6.7	7.8	7.6	5.6	5.1	6.9	6.6	6.6	6.1
28	9.4	9.1	7.1	6.8	8.1	7.6	6.5	5.5	7.1	6.4	6.6	6.0
29	9.1	8.8	6.9	6.7	8.6	8.1	6.8	5.8	6.9	6.1	6.4	5.9
30	9.1	8.8	6.9	6.8	9.1	8.6	8.6	5.8	6.7	6.0	6.0	5.8
31	---	---	7.0	6.9	---	---	10.0	6.1	6.7	5.9	---	---
MONTH	---	---	11.4	6.6	9.1	6.7	13.0	3.4	15.0	4.0	7.4	5.5

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04184100 MAUMEE RIVER AT DEFIANCE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	21.0	15.5	14.5	2.5	1.5	3.5	2.0	---	---	1.5	0.5
2	23.0	21.5	16.0	15.0	2.0	1.5	3.5	3.0	---	---	1.5	0.5
3	23.5	22.0	15.0	12.0	1.5	1.0	3.0	2.0	---	---	1.5	0.0
4	23.0	22.0	12.0	10.0	1.5	1.0	3.0	0.5	---	---	3.5	1.5
5	22.0	20.5	10.0	9.0	2.0	1.0	1.0	0.5	---	---	2.5	1.0
6	21.0	19.0	10.0	8.0	3.0	1.5	1.0	0.5	---	---	1.0	0.0
7	19.0	17.0	8.0	5.0	4.5	3.0	1.0	0.5	---	---	2.0	0.0
8	17.0	15.0	5.0	4.0	5.5	4.5	1.0	0.5	---	---	2.0	1.0
9	16.0	15.0	4.5	4.0	6.5	5.5	1.0	0.5	---	---	1.0	0.0
10	15.5	14.5	5.0	4.0	8.0	6.0	1.5	1.0	---	---	1.0	0.0
11	14.5	13.5	5.5	4.5	8.0	7.0	1.5	1.0	1.0	0.5	3.0	0.5
12	14.0	12.5	6.0	5.0	7.0	6.0	1.5	1.0	1.0	0.5	5.0	3.0
13	14.5	13.0	6.5	6.0	6.5	5.5	2.0	1.0	1.0	0.5	5.0	3.5
14	15.0	14.0	8.0	6.0	5.5	5.0	1.0	0.0	1.0	0.0	4.0	3.5
15	15.5	14.5	10.0	8.0	6.5	5.0	0.5	0.0	0.5	0.0	---	---
16	17.0	15.5	10.0	9.5	6.5	5.5	1.0	0.0	0.5	0.0	---	---
17	17.0	16.5	10.5	9.0	6.0	5.5	1.0	1.0	1.0	0.5	---	---
18	17.0	16.5	12.5	10.5	5.5	4.5	1.0	0.5	1.0	0.5	---	---
19	18.0	16.5	12.5	10.5	4.5	3.5	0.5	0.0	0.5	0.5	---	---
20	18.0	16.5	10.5	7.5	3.5	3.0	0.5	0.0	0.5	0.0	---	---
21	18.5	17.0	7.5	5.5	3.5	3.0	0.5	0.0	0.5	0.0	---	---
22	18.5	18.0	5.5	3.5	3.0	1.5	0.5	0.0	0.5	0.0	8.0	7.0
23	18.5	18.5	3.5	1.5	2.5	1.0	0.5	0.0	0.5	0.0	---	---
24	18.5	17.5	2.5	1.5	4.0	1.5	---	---	0.5	0.0	---	---
25	18.0	17.0	2.5	1.5	4.0	2.0	---	---	0.5	0.0	---	---
26	17.5	16.5	2.5	2.0	5.0	3.5	---	---	0.5	0.0	---	---
27	17.5	16.5	3.0	2.0	6.0	3.5	---	---	0.5	0.0	---	---
28	17.5	16.0	3.5	3.0	6.5	4.0	---	---	0.5	0.0	---	---
29	16.5	15.5	3.0	3.0	4.5	2.5	---	---	0.5	0.0	---	---
30	16.5	15.5	3.0	2.5	4.0	3.0	---	---	---	---	---	---
31	16.5	15.5	---	---	3.5	2.5	---	---	---	---	---	---
MONTH	23.5	12.5	16.0	1.5	8.0	1.0	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	14.0	13.0	20.5	16.5	26.5	22.0	26.0	24.0	26.0	24.5
2	---	---	14.0	13.5	23.0	17.5	26.5	24.0	26.0	24.5	25.5	22.0
3	---	---	14.0	13.5	24.0	19.0	24.0	21.0	25.5	24.5	22.0	20.5
4	---	---	14.0	13.5	27.5	20.0	22.0	20.5	25.0	23.5	21.5	20.5
5	---	---	15.0	13.0	29.0	20.5	24.5	21.5	25.5	23.5	21.5	20.0
6	---	---	16.5	15.0	28.0	23.5	25.0	21.0	26.0	23.5	22.0	20.5
7	---	---	16.5	14.5	24.5	21.5	24.5	21.0	24.0	21.5	22.0	21.0
8	---	---	14.5	12.5	25.0	21.0	24.5	21.5	21.5	19.5	23.5	23.0
9	---	---	15.0	12.0	25.0	21.5	24.0	23.0	20.5	19.0	24.0	23.0
10	---	---	16.0	14.0	23.5	18.5	25.0	22.0	21.5	19.5	23.0	22.0
11	---	---	15.5	13.0	24.5	18.0	28.5	24.5	21.5	20.0	22.0	21.0
12	---	---	16.5	16.0	23.5	18.5	29.0	26.5	23.0	20.5	22.5	21.5
13	---	---	16.5	16.0	25.0	21.5	29.0	26.5	25.5	23.0	23.5	21.5
14	---	---	16.5	16.0	27.0	23.0	28.0	25.5	27.0	25.0	23.0	20.5
15	---	---	16.5	16.0	26.5	24.0	27.0	24.5	28.0	24.5	21.5	20.5
16	---	---	16.0	14.5	25.5	21.5	25.0	24.0	25.0	23.5	21.0	20.0
17	---	---	17.0	14.0	22.0	20.5	24.5	24.5	27.0	24.0	21.0	20.0
18	---	---	18.0	16.5	24.0	19.5	25.5	23.5	29.5	26.5	20.5	19.5
19	14.5	14.0	18.5	18.0	24.5	20.5	25.0	23.5	30.0	28.0	20.5	19.5
20	14.0	12.5	19.0	18.5	26.0	23.5	26.0	24.0	29.0	25.0	19.5	19.0
21	12.5	11.0	20.0	19.0	26.0	21.0	26.5	25.0	29.0	23.5	19.5	19.0
22	11.0	10.0	21.0	19.5	21.0	18.5	28.0	25.5	28.0	26.0	19.0	18.0
23	10.5	10.0	22.0	20.5	18.5	15.5	28.5	27.0	28.0	26.0	18.0	16.5
24	10.5	9.5	22.5	21.0	16.0	15.0	28.5	28.0	28.5	26.0	18.5	16.5
25	10.0	9.0	25.0	21.0	20.0	15.5	26.5	25.5	27.0	24.5	18.5	17.5
26	10.0	9.5	22.5	21.0	21.5	19.5	26.5	24.5	26.5	25.0	19.5	18.0
27	11.0	10.0	27.0	21.5	23.5	21.5	24.5	21.5	26.0	24.5	19.5	18.5
28	11.5	10.5	23.0	21.5	24.5	23.0	23.0	20.5	26.0	23.0	18.5	17.5
29	12.0	11.5	23.0	21.5	25.5	23.5	23.5	21.5	26.5	25.0	19.0	18.0
30	13.0	12.0	22.0	20.0	25.5	23.0	24.5	23.0	26.0	24.5	18.0	15.5
31	---	---	21.0	17.5	---	---	26.0	23.0	26.0	24.5	---	---
MONTH	---	---	27.0	12.0	29.0	15.0	29.0	20.5	30.0	19.0	26.0	15.5
YEAR	30.0	0.0										

04184500 BEAN CREEK AT POWERS, OHIO

LOCATION.--Lat 41°40'39", long 84°13'56", in NE 1/4 sec.24, T.9 S., R.1 E., Fulton County, at gaging station on right bank at downstream side of bridge on U.S. Highway 20, 1 mile east of Powers, 2.2 miles upstream from Iron Creek, 3 miles downstream from Silver Creek, and 5.2 miles east of Fayette.

DRAINAGE AREA.--206 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.								
04...	1100	12	--	--	274	--	30	--
NOV.								
22...	1030	23	--	--	--	--	--	--
DEC.								
01...	1550	25	--	--	--	--	--	--
13...	1000	80	--	--	215	--	28	--
JAN.								
19...	1440	94	--	--	--	140	31	--
FEB.								
16...	1000	74	--	--	--	--	30	--
MAR.								
08...	1345	100	--	--	--	100	20	--
20...	1050	150	--	--	154	--	18	--
APR.								
26...	1200	289	--	--	--	--	30	--
MAY								
03...	1335	465	--	--	--	76	16	--
JUNE								
14...	0930	40	--	--	259	--	30	--
JULY								
17...	1110	60	--	--	--	--	40	--
AUG.								
01...	1000	20	286	16	261	73	24	.4
21...	1150	38	--	--	--	--	40	--
22...	1145	26	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL RESI-DUE (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	PHENOLS (UG/L)	TUR-BID-ITY (JTU)
OCT.								
04...	420	6	426	694	7.8	18.0	12	3
NOV.								
22...	--	--	--	695	7.9	5.0	1	3
DEC.								
01...	--	--	--	608	--	1.5	--	--
13...	474	36	510	698	7.9	9.0	10	1
JAN.								
19...	--	--	--	821	7.7	2.5	--	--
FEB.								
16...	--	--	--	629	7.5	.5	24	10
MAR.								
08...	--	--	--	561	8.2	.0	--	--
20...	374	62	436	527	7.6	3.5	11	30
APR.								
26...	--	--	--	568	7.5	9.5	14	15
MAY								
03...	--	--	--	521	7.2	15.0	--	--
JUNE								
14...	438	20	458	626	8.0	--	1	5
JULY								
17...	--	--	--	608	7.3	21.0	13	15
AUG.								
01...	416	--	--	625	8.7	20.5	--	--
21...	--	--	--	650	7.8	20.5	6	0
22...	--	--	--	632	--	21.5	--	--

04184500 BEAN CREEK AT POWERS, OHIO--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1965-67, 1969 (partial-record station); October 1969 to September 1972.

REMARKS.--Samples collected monthly by the Lansing, Michigan district office as part of the Environmental Protection Agency national network. Additional samples collected by the Columbus, Ohio district office to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)
OCT.									
04...	.1	--	--	.02	.12	.14	--	320	--
NOV.									
22...	.00	--	--	--	--	.12	--	410	--
DEC.									
01...	--	--	--	--	--	--	--	--	--
13...	3.5	--	--	.12	.71	.40	--	360	--
JAN.									
19...	2.5	--	11	--	--	--	--	440	--
FEB.									
16...	1.8	--	--	--	--	.20	--	440	--
MAR.									
08...	1.9	2.0	8.6	--	--	--	--	280	--
20...	3.7	--	--	.18	1.3	.20	--	260	--
APR.									
26...	2.8	--	--	--	--	.19	--	380	--
MAY									
03...	2.9	--	13	--	--	--	--	160	--
JUNE									
14...	.8	--	--	.09	.63	.11	--	430	--
JULY									
17...	2.7	--	--	--	--	.17	--	340	--
AUG.									
01...	.6	--	2.9	--	--	.19	.58	330	68
21...	.7	--	--	--	--	.22	--	340	--
22...	--	--	--	--	--	--	--	--	--

04185300 TIFFIN RIVER AT EVANSPORT, OHIO

LOCATION.--Lat 41°25'38", long 84°23'22", in SE 1/4 sec.33, T.6 N., R.4 E., Defiance County, on left bank at upstream side of bridge on State Highway 191, 0.4 mile east of center of Evansport, 1,300 ft downstream from Brush Creek, and 6.5 miles downstream from Beaver Creek.

DRAINAGE AREA.--541 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1972.
Water temperatures: June 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,030 micromhos Feb. 23; minimum, 372 micromhos Sept. 15.
pH: Maximum, 8.9 Apr. 11, 12; minimum, 6.5 Feb. 12.
Dissolved oxygen: Maximum, 15.0 mg/l Jan. 8-10; minimum, 3.5 mg/l Oct. 24.
Water temperatures: Maximum, 30.5°C July 22, 23; minimum, freezing point on many days during December to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.							
02...	1130	266	14	72	53	.5	1.4
09...	1300	304	0	69	45	.5	.70
14...	1015	--	--	--	--	--	--
NOV.							
08...	0800	296	24	75	39	.5	.20
19...	1700	306	16	74	52	.5	.40
DEC.							
18...	1820	194	0	100	41	.3	3.0
25...	1130	270	0	120	43	.3	1.5
JAN.							
01...	1600	140	0	79	40	.3	13
19...	1620	310	0	140	48	.4	7.4
FEB.							
11...	1335	320	0	120	48	3.0	2.9
21...	1605	208	10	99	39	.2	3.4
MAR.							
07...	1645	200	0	100	36	.2	3.8
17...	1700	100	0	60	24	.2	7.8
APR.							
10...	1710	213	10	120	47	.6	4.9
15...	1900	136	0	73	25	.5	7.9
MAY							
11...	1900	216	8	85	26	.6	3.7
15...	1635	254	0	100	34	.6	3.9
JUNE							
08...	1025	--	--	--	--	--	--
21...	0930	260	16	100	45	.6	12
28...	2000	296	0	89	34	.7	3.7
JULY							
21...	1300	244	14	71	33	.4	1.6
29...	0925	262	17	75	46	.4	1.7
AUG.							
01...	2100	290	11	74	49	.5	1.0
20...	1050	212	0	68	59	.4	2.4
SEP.							
09...	1830	285	18	75	46	.5	.70
16...	0820	128	0	48	23	.3	5.5

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-72): Maximum, 1,120 micromhos Oct. 11, 1970; minimum, 170 micromhos Feb. 23, 1971.
pH (1971-72): Maximum, 8.9 Apr. 11, 12, 1972; minimum, 6.5 Feb. 12, 1972.
Dissolved oxygen (1971-72): Maximum, 15.0 mg/l Jan. 8-10, 1972; minimum, 3.5 mg/l Oct. 24, 1971.
Water temperatures (1970-72): Maximum, 30.5°C July 22, 23, 1972; minimum, freezing point on many days during winter months.

REMARKS.--Continuous water-quality recorder operated since June 1968. Maximum recorded pH of 9.1 occurred Mar. 16-18, 1969. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Minimum recorded dissolved oxygen concentration of 2.2 mg/l occurred on Nov. 28-30, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
02...	6.0	452	310	68	743	--	--
09...	3.1	424	310	60	716	--	--
14...	--	--	--	--	--	<.5	3.0
NOV.							
08...	1.1	474	340	57	734	--	--
19...	1.8	472	320	42	773	--	--
DEC.							
18...	13	460	310	150	679	--	--
25...	6.5	528	380	160	789	--	--
JAN.							
01...	59	360	260	140	583	--	--
19...	33	586	450	200	895	--	--
FEB.							
11...	13	546	410	150	856	--	--
21...	15	432	320	130	678	--	--
MAR.							
07...	17	380	230	66	637	--	--
17...	34	238	180	98	405	--	--
APR.							
10...	22	456	340	150	713	--	--
15...	35	278	220	110	452	--	--
MAY							
11...	16	372	300	110	598	--	--
15...	17	408	330	120	733	--	--
JUNE							
08...	--	--	--	--	--	<.5	10
21...	53	510	410	170	805	--	--
28...	16	454	360	120	712	--	--
JULY							
21...	7.2	424	310	86	630	--	--
29...	7.5	462	320	76	701	--	--
AUG.							
01...	4.3	476	330	74	732	--	--
20...	10	396	240	66	640	--	--
SEP.							
09...	3.2	466	330	66	716	--	--
16...	24	280	180	75	417	--	--

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	750	732	---	---	769	742	---	---	831	828	757	706
2	765	750	---	---	779	767	---	---	843	828	706	637
3	774	762	---	---	793	769	---	---	849	843	637	592
4	756	744	719	695	797	776	---	---	846	837	592	529
5	759	744	721	709	778	769	747	732	837	825	562	538
6	759	750	724	715	774	732	774	717	825	810	610	565
7	753	741	732	721	739	721	783	768	834	813	646	616
8	741	735	740	728	759	714	810	783	837	816	676	649
9	744	732	752	734	753	699	822	777	861	837	700	679
10	747	741	758	743	780	597	819	762	879	861	715	694
11	777	747	753	744	663	546	762	726	876	858	712	676
12	786	768	756	750	696	663	765	735	868	862	673	664
13	774	756	765	756	714	651	768	759	868	859	667	532
14	756	633	758	746	699	663	789	765	877	853	511	424
15	723	621	---	---	681	465	813	789	862	829	433	418
16	729	681	---	---	594	519	861	813	904	808	415	403
17	702	552	---	---	756	594	894	858	808	748	406	391
18	627	522	---	---	753	606	900	894	748	727	412	406
19	681	528	---	---	696	669	921	897	727	688	451	412
20	705	648	---	---	738	696	951	897	694	670	506	451
21	696	621	---	---	777	735	897	834	685	670	560	506
22	669	639	---	---	771	744	834	720	697	685	593	557
23	750	648	---	---	792	771	720	603	1030	700	593	539
24	741	720	748	703	813	783	636	588	781	742	533	500
25	750	738	747	735	813	786	651	600	757	748	560	512
26	744	726	757	736	822	---	684	645	772	757	605	563
27	747	732	759	735	---	---	729	684	781	763	629	605
28	---	---	740	734	---	---	765	729	784	766	653	632
29	---	---	735	726	---	---	795	765	772	736	662	653
30	---	---	743	734	---	---	813	795	---	---	686	662
31	---	---	---	---	---	---	831	813	---	---	692	683
MONTH	786	522	---	---	622	465	951	588	1030	670	757	391

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	704	692	648	630	---	---	690	657	711	705	696	672
2	698	689	657	642	---	---	699	660	708	687	693	690
3	692	683	642	483	---	---	660	648	708	690	705	693
4	689	680	537	483	---	---	660	645	726	708	705	693
5	704	677	---	---	---	---	666	654	720	702	699	687
6	713	689	---	---	---	---	693	666	711	690	696	681
7	692	686	---	---	---	---	693	687	690	669	693	681
8	692	686	---	---	759	756	693	687	735	672	717	684
9	710	686	645	642	762	753	696	687	744	696	738	717
10	734	710	645	624	762	756	702	687	699	690	744	735
11	722	716	624	585	768	756	714	687	696	663	738	717
12	716	710	618	585	768	747	687	675	690	681	720	693
13	710	701	630	618	750	738	687	678	681	639	696	669
14	707	653	639	630	741	735	681	669	654	633	693	429
15	656	449	669	639	741	582	675	657	699	645	513	372
16	572	467	648	627	747	648	669	654	678	627	498	375
17	491	443	654	618	771	744	675	666	627	576	519	498
18	527	491	621	615	804	771	669	648	642	576	564	519
19	524	495	633	621	813	804	657	642	624	510	585	507
20	549	501	645	633	816	807	639	615	705	618	618	549
21	558	549	654	645	834	804	624	612	654	630	600	531
22	549	486	657	654	855	729	633	591	672	654	597	570
23	525	489	---	---	765	723	633	591	657	579	624	597
24	537	525	---	---	723	705	642	630	618	591	651	624
25	576	540	---	---	747	723	651	642	657	618	669	651
26	609	576	---	---	738	735	651	636	681	657	669	600
27	627	606	---	---	741	726	654	636	702	675	711	636
28	639	624	---	---	726	708	699	654	678	663	681	588
29	645	639	---	---	711	630	702	690	687	672	588	552
30	654	642	---	---	690	669	714	693	675	663	615	579
31	---	---	---	---	---	---	729	699	675	666	---	---
MONTH	734	443	---	---	---	---	729	591	744	510	744	372
YEAR	1030	372										

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.9	7.8	---	---	7.9	7.7	7.5	7.3	7.2	6.9	7.3	7.2
2	7.9	7.7	---	---	7.8	7.6	7.5	7.3	7.2	7.0	7.7	7.3
3	7.9	7.8	---	---	7.8	7.6	7.6	7.2	7.4	7.0	7.7	7.3
4	7.9	7.8	7.6	7.5	7.8	7.7	7.9	7.2	7.5	7.4	7.6	7.4
5	7.9	7.8	7.6	7.6	7.7	7.7	7.9	7.5	7.5	7.1	7.6	7.5
6	7.9	7.9	7.7	7.6	7.7	7.6	7.9	7.7	7.3	7.1	7.6	7.4
7	8.0	7.9	7.7	7.7	7.8	7.6	7.8	7.6	7.3	7.1	7.5	7.3
8	8.1	8.0	7.7	7.5	7.7	7.6	7.7	7.4	7.3	7.0	7.7	7.5
9	8.1	8.0	7.6	7.5	7.8	7.7	7.6	7.5	7.3	6.9	7.7	7.5
10	8.0	8.0	7.6	7.5	7.8	7.7	7.6	7.3	7.2	6.9	7.8	7.3
11	8.0	8.0	7.6	7.5	7.7	7.6	7.7	7.6	7.2	7.0	7.7	7.0
12	8.1	8.0	7.5	7.5	7.8	7.7	7.7	7.6	7.2	6.5	7.6	7.4
13	8.1	8.0	7.6	7.5	7.8	7.7	7.8	7.7	7.3	7.1	7.7	7.5
14	8.1	8.0	7.5	7.3	7.8	7.7	7.9	7.7	7.3	6.9	7.5	7.4
15	8.1	7.9	---	---	7.7	7.5	7.8	7.6	7.3	7.2	7.3	7.1
16	8.0	7.9	---	---	7.6	7.5	7.7	7.5	7.5	6.7	7.3	7.2
17	8.0	7.9	---	---	7.7	7.5	7.6	7.3	8.1	6.8	7.3	7.2
18	8.0	8.0	---	---	7.7	7.7	7.3	7.1	7.6	7.3	7.4	7.2
19	8.0	7.9	---	---	7.7	7.7	7.2	7.0	7.6	7.5	7.5	7.1
20	8.0	7.9	---	---	7.7	7.7	7.2	7.1	7.6	7.2	7.7	7.5
21	8.0	7.9	---	---	7.7	7.6	7.2	7.1	7.5	7.4	7.7	7.5
22	8.0	7.9	---	---	7.8	7.6	7.2	7.0	7.6	7.2	8.1	7.7
23	7.9	7.8	---	---	7.8	7.7	7.3	7.1	7.6	7.2	8.1	8.0
24	7.8	7.8	7.7	7.6	7.8	7.7	7.3	7.1	7.4	7.3	8.1	8.0
25	7.8	7.8	7.7	7.6	7.6	7.8	7.5	7.3	7.5	7.2	8.1	8.1
26	7.8	7.8	7.7	7.7	7.8	7.8	7.4	7.2	7.5	7.1	8.2	8.0
27	7.8	7.8	7.8	7.7	7.8	7.7	7.4	7.2	7.5	7.2	8.1	8.0
28	---	---	7.8	7.7	7.9	7.8	7.3	7.2	7.4	7.2	8.2	8.1
29	---	---	7.9	7.8	7.8	7.7	7.4	7.1	7.4	7.1	8.2	8.2
30	---	---	7.9	7.8	7.8	7.5	7.4	7.3	---	---	8.3	8.2
31	---	---	---	---	7.8	7.1	7.4	7.2	---	---	8.3	8.2
MONTH	8.1	7.7	---	---	7.9	7.1	7.9	7.0	8.1	6.5	8.3	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.3	8.2	8.1	8.0	---	---	8.0	7.7	8.0	7.9	8.2	8.0
2	8.3	8.2	8.2	8.1	---	---	7.9	7.8	8.0	7.9	8.1	8.1
3	8.7	8.2	8.2	8.1	---	---	7.9	7.8	8.0	7.9	8.1	8.1
4	8.3	8.3	---	---	---	---	7.9	7.8	8.0	7.9	8.2	8.1
5	8.3	8.2	---	---	---	---	7.9	7.9	8.0	7.9	8.2	8.1
6	8.6	8.1	---	---	---	---	8.0	7.9	8.0	7.9	8.2	8.1
7	8.4	8.4	---	---	---	---	8.0	8.0	8.0	7.9	8.2	8.1
8	8.5	8.4	---	---	7.8	7.8	8.0	8.0	8.0	7.9	8.2	8.1
9	8.5	8.2	8.1	8.0	7.8	7.7	8.1	8.0	8.0	7.9	8.2	8.1
10	8.4	8.2	8.3	8.0	7.9	7.8	8.1	8.0	8.0	7.9	8.2	8.1
11	8.9	8.1	8.3	8.0	7.9	7.8	8.1	8.0	8.0	7.9	8.2	8.1
12	8.9	8.2	8.2	8.0	7.9	7.8	8.0	8.0	8.0	7.9	8.1	8.0
13	8.2	8.1	8.1	8.0	7.9	7.8	8.0	8.0	7.9	7.8	8.1	7.9
14	8.2	8.1	8.1	8.0	7.8	7.8	8.0	7.9	7.9	7.8	8.1	7.5
15	8.1	7.7	8.1	8.0	7.8	7.5	7.9	7.9	7.9	7.8	7.7	7.4
16	7.9	7.7	8.0	8.0	7.6	7.4	7.9	7.8	7.8	7.7	7.5	7.4
17	7.8	7.5	8.1	8.0	7.6	7.4	7.9	7.9	7.8	7.6	7.5	7.4
18	8.4	7.6	8.0	8.0	7.7	7.6	8.0	7.9	7.8	7.7	7.6	7.4
19	8.4	7.7	8.1	8.0	7.7	7.6	8.0	7.9	7.8	7.6	7.6	7.5
20	8.1	7.8	8.0	7.9	7.7	7.7	8.0	7.9	7.7	7.6	7.8	7.6
21	8.2	8.1	8.0	7.9	7.9	7.7	7.9	7.9	7.8	7.7	7.8	7.7
22	8.2	8.1	8.0	7.9	7.8	7.7	8.0	7.8	7.9	7.8	7.8	7.8
23	8.1	8.0	---	---	7.9	7.8	8.1	7.8	7.9	7.7	7.9	7.8
24	8.2	8.1	---	---	7.9	7.8	8.1	8.0	7.9	7.8	7.9	7.8
25	8.3	8.2	---	---	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.8
26	8.4	8.1	---	---	7.9	7.9	7.9	7.8	8.0	7.9	8.0	7.6
27	8.4	8.1	---	---	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.7
28	8.4	8.1	---	---	8.0	7.9	7.9	7.8	8.0	7.9	7.8	7.7
29	8.2	8.1	---	---	8.0	7.9	7.9	7.8	8.0	7.9	7.7	7.7
30	8.3	8.1	---	---	8.0	7.9	7.9	7.9	8.1	7.9	7.8	7.6
31	---	---	---	---	---	---	7.9	7.8	8.2	8.0	---	---
MONTH	8.9	7.5	---	---	---	---	8.1	7.7	8.2	7.6	8.2	7.4
YEAR	8.9	6.5										

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

DISSOLVED OXYGEN (DO). IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.7	5.2	---	---	8.0	7.7	11.3	11.0	13.9	8.8	13.3	11.4
2	5.4	4.7	---	---	9.2	7.9	11.5	10.6	9.1	8.9	13.0	11.4
3	5.1	4.6	---	---	8.2	7.7	11.5	10.9	9.3	8.8	13.0	11.2
4	5.0	4.5	7.0	6.3	8.0	7.6	11.7	11.4	9.6	8.9	12.8	11.2
5	4.9	4.4	8.3	6.3	7.8	7.5	12.5	11.5	10.0	9.0	12.7	11.2
6	5.1	4.5	7.5	5.0	7.5	7.3	13.1	12.3	9.0	8.5	12.3	11.1
7	5.6	5.1	5.0	4.2	7.6	7.4	13.7	12.7	8.7	8.4	12.6	11.1
8	6.3	5.6	4.4	4.1	9.6	7.2	15.0	13.4	8.4	8.1	12.8	12.0
9	7.4	6.3	4.3	4.1	8.8	8.4	15.0	14.0	8.5	8.0	12.6	12.2
10	7.2	5.7	4.3	4.0	8.7	7.4	15.0	11.9	8.4	8.1	12.9	12.3
11	7.3	7.0	4.3	4.1	8.6	8.1	13.7	12.9	9.3	8.1	13.5	12.3
12	7.6	7.3	4.3	4.1	8.4	8.0	14.0	11.5	11.0	8.5	13.6	12.4
13	7.8	7.5	4.4	4.0	8.9	8.3	13.7	12.6	11.4	8.1	13.3	12.0
14	7.4	5.9	4.2	3.9	9.3	8.6	14.0	13.5	9.2	8.0	13.0	11.7
15	6.8	5.6	---	---	10.0	8.7	14.1	13.4	11.9	8.3	14.0	11.5
16	6.4	6.0	---	---	9.2	8.8	13.5	13.0	11.7	9.8	13.4	11.0
17	6.4	6.0	---	---	9.4	9.1	13.6	12.7	11.9	10.5	13.0	10.8
18	6.3	6.0	---	---	10.0	9.4	13.3	12.4	12.8	10.8	13.7	11.8
19	6.9	4.8	---	---	10.5	10.0	12.9	12.1	13.1	11.6	14.9	7.8
20	6.5	4.6	---	---	10.5	10.0	12.6	11.8	12.5	11.5	11.4	6.7
21	6.4	5.4	---	---	10.2	9.8	12.8	11.9	13.8	12.1	10.6	9.8
22	6.0	5.1	---	---	11.2	9.6	14.1	10.9	13.7	12.1	10.0	9.7
23	5.3	3.6	---	---	11.3	10.4	14.2	11.2	14.2	12.6	10.5	10.0
24	4.0	3.5	7.3	6.9	10.7	10.4	12.8	10.4	13.6	11.6	10.8	10.5
25	4.0	3.6	7.5	7.1	10.8	10.4	13.4	11.9	12.5	10.8	11.0	10.8
26	4.1	3.6	7.6	7.3	11.1	10.7	13.1	11.7	12.4	10.8	10.9	10.5
27	3.9	3.7	8.0	7.4	10.9	10.7	11.9	11.3	12.6	10.9	10.5	10.0
28	---	---	8.2	7.9	10.9	10.6	11.4	11.0	12.2	10.7	10.1	9.8
29	---	---	8.3	7.8	10.9	10.7	11.3	10.9	13.0	10.9	10.0	9.8
30	---	---	8.5	7.8	11.2	10.9	11.1	10.7	---	---	10.4	9.9
31	---	---	---	---	11.5	10.8	12.2	11.0	---	---	10.7	10.4
MONTH	7.8	3.5	---	---	11.5	7.2	15.0	10.4	14.2	8.0	14.9	6.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.6	9.8	---	---	---	---	6.3	5.9	5.3	5.0	6.1	5.6
2	9.9	9.6	---	---	---	---	6.3	5.9	5.3	4.9	6.2	5.6
3	10.5	9.7	---	---	---	---	6.5	6.0	5.2	4.9	6.6	6.2
4	10.3	9.8	---	---	---	---	7.0	6.1	5.2	4.9	6.9	6.4
5	9.9	9.6	---	---	---	---	6.5	6.2	5.7	5.0	7.2	6.5
6	9.6	9.5	---	---	---	---	7.2	6.3	5.5	5.2	7.2	6.6
7	9.8	9.5	---	---	---	---	7.3	6.6	5.3	5.1	6.9	6.4
8	10.8	9.8	---	---	8.4	6.3	7.3	6.7	5.5	5.1	6.4	6.2
9	11.3	10.8	8.5	7.3	8.2	7.4	6.9	6.4	5.8	5.4	6.6	6.2
10	11.1	9.1	7.8	7.5	7.7	4.7	6.8	6.2	6.1	5.6	7.0	6.4
11	9.1	7.2	8.0	7.6	---	---	6.7	5.9	6.0	5.7	6.9	6.6
12	7.0	5.7	7.6	7.2	---	---	6.3	5.9	5.7	5.2	6.6	6.5
13	8.3	4.6	7.3	6.8	---	---	6.1	5.7	5.5	4.9	6.5	6.1
14	9.4	7.7	6.8	6.6	---	---	6.3	5.9	5.4	4.7	6.5	6.1
15	8.4	7.7	6.6	6.3	---	---	6.2	5.8	5.1	4.8	6.8	6.4
16	8.4	7.7	6.7	6.3	---	---	6.7	6.1	5.6	5.1	6.9	6.7
17	8.3	7.8	7.0	6.7	---	---	6.4	3.9	5.3	4.9	6.9	6.6
18	12.3	7.8	7.0	6.7	---	---	5.5	4.9	5.2	5.1	6.8	6.5
19	11.3	7.1	6.8	6.0	---	---	5.5	5.3	5.4	5.1	6.8	6.7
20	7.1	6.7	6.0	5.8	---	---	5.4	5.2	5.8	5.3	6.8	5.6
21	6.8	6.4	5.8	5.6	7.0	7.0	5.4	4.8	5.7	5.4	6.0	5.8
22	6.4	6.3	5.7	5.5	7.1	6.9	5.0	4.5	5.7	5.3	6.3	6.0
23	6.3	5.7	---	---	7.0	6.8	5.1	4.9	5.6	5.2	6.6	6.2
24	5.7	5.6	---	---	7.2	7.0	5.3	5.0	5.6	5.3	6.7	6.5
25	5.7	5.5	---	---	7.4	7.0	5.7	4.7	5.7	5.3	6.5	6.2
26	5.6	5.2	---	---	7.1	6.6	5.4	5.1	5.7	5.3	6.2	5.8
27	5.2	4.8	---	---	6.9	6.5	5.5	5.3	5.7	5.4	6.0	5.7
28	---	---	---	---	6.4	5.7	5.9	5.4	6.1	5.6	6.2	6.0
29	---	---	---	---	6.2	5.6	6.0	5.3	6.3	5.6	6.3	6.1
30	---	---	---	---	6.3	5.9	5.8	5.1	6.1	5.6	6.9	6.3
31	---	---	---	---	---	---	5.7	5.0	6.2	5.6	---	---
MONTH	12.3	4.8	---	---	---	---	7.3	3.9	6.3	4.7	7.2	5.6
YEAR	15.0	3.5										

04185300 TIFFIN RIVER AT EVANSPORT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	19.5	---	---	2.0	0.5	2.5	1.5	1.0	0.0	0.5	0.0
2	23.5	19.5	---	---	1.5	0.0	2.5	1.5	1.0	0.0	0.0	0.0
3	23.0	19.5	---	---	1.0	0.0	3.5	1.0	0.5	0.0	0.0	0.0
4	21.0	19.0	10.5	8.0	0.5	0.0	2.0	0.0	0.0	0.0	0.5	0.0
5	19.5	17.0	10.0	7.5	0.5	0.0	0.5	0.0	0.5	0.0	0.0	0.0
6	17.0	14.5	8.0	5.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
7	14.5	12.0	5.0	2.0	2.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
8	12.0	10.0	4.0	0.5	3.5	2.5	1.0	0.0	0.5	0.0	0.0	0.0
9	12.0	10.5	2.0	1.5	4.5	3.0	0.5	0.0	0.5	0.0	0.0	0.0
10	11.5	10.0	3.0	1.0	9.0	4.5	1.5	0.0	0.5	0.0	0.5	0.0
11	11.5	9.5	4.0	2.0	9.0	7.0	0.5	0.0	0.0	0.0	1.5	0.0
12	11.5	8.5	4.5	2.5	7.0	5.0	1.0	0.0	1.0	0.0	0.5	0.0
13	11.0	9.0	4.5	3.0	6.5	4.5	1.0	0.0	0.0	0.0	0.0	0.0
14	13.5	10.0	7.0	3.5	4.5	3.0	0.0	0.0	0.5	0.0	0.0	0.0
15	15.0	11.0	---	---	6.5	4.0	0.5	0.0	0.0	0.0	0.5	0.0
16	16.0	12.5	---	---	7.0	6.5	0.5	0.0	0.5	0.0	2.0	0.0
17	16.0	14.0	---	---	6.5	3.0	1.0	0.0	1.0	0.0	2.5	1.5
18	16.0	14.5	---	---	3.5	2.5	1.0	0.5	0.0	0.0	3.0	1.5
19	17.5	14.0	---	---	2.5	1.5	1.5	1.0	0.0	0.0	4.5	1.5
20	18.0	13.0	---	---	2.0	1.5	1.0	1.0	0.0	0.0	4.5	3.0
21	17.0	14.5	---	---	2.5	1.5	1.0	0.5	0.0	0.0	7.0	3.5
22	17.0	16.0	---	---	1.5	0.0	1.0	0.5	0.5	0.0	6.5	3.5
23	17.5	16.5	---	---	1.5	0.0	1.0	0.5	0.0	0.0	3.5	0.5
24	17.5	16.0	1.5	1.0	3.0	1.5	1.0	0.0	0.0	0.0	2.0	0.0
25	17.5	16.5	2.0	0.5	2.5	1.5	0.0	0.0	0.0	0.0	2.5	0.0
26	18.0	16.0	3.0	1.5	4.5	2.5	0.5	0.0	0.5	0.0	4.0	0.5
27	17.5	16.5	2.5	2.0	6.5	4.0	0.5	0.0	0.0	0.0	6.0	3.0
28	---	---	3.0	2.0	5.5	3.5	0.5	0.0	0.0	0.0	6.5	3.5
29	---	---	2.5	1.5	3.5	2.0	0.5	0.0	0.5	0.0	4.5	3.0
30	---	---	2.5	1.0	3.5	2.5	0.0	0.0	---	---	5.0	2.5
31	---	---	---	---	3.5	2.0	0.5	0.0	---	---	5.5	1.5
MONTH	23.5	8.5	---	---	9.0	0.0	3.5	0.0	1.0	0.0	7.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	3.0	15.5	12.5	---	---	24.5	20.5	24.0	22.0	25.0	21.0
2	5.5	3.5	16.5	14.0	---	---	23.0	21.5	24.5	22.0	23.5	18.5
3	7.0	3.5	16.0	13.5	---	---	23.0	20.0	24.0	22.5	20.0	17.5
4	7.5	4.0	15.0	13.0	---	---	21.5	19.0	23.5	20.0	20.0	17.0
5	9.0	5.0	---	---	---	---	20.5	18.0	23.0	18.5	19.5	16.0
6	11.5	7.0	---	---	---	---	21.0	16.5	21.5	19.0	20.0	16.5
7	8.0	3.5	---	---	---	---	20.0	17.0	20.5	19.5	20.5	17.0
8	5.0	2.0	---	---	23.0	20.0	22.0	17.0	19.5	18.0	21.5	19.5
9	6.0	2.0	13.0	11.5	23.0	20.5	22.0	19.5	19.5	16.5	20.5	18.0
10	8.5	3.5	13.5	9.5	20.5	18.0	25.0	20.0	20.5	15.5	19.5	16.0
11	11.0	7.0	15.0	10.0	20.0	15.5	27.5	22.5	19.0	16.5	20.0	17.5
12	13.5	9.5	16.5	12.0	19.5	17.0	27.5	24.0	21.5	17.5	20.5	19.0
13	18.0	12.5	15.0	13.5	22.0	18.5	26.0	24.0	24.0	19.0	22.5	20.0
14	16.0	13.5	16.5	14.5	24.0	20.0	27.5	23.5	25.5	21.0	21.5	20.0
15	14.5	11.0	16.5	14.5	23.0	21.5	26.0	24.0	24.5	22.0	20.5	18.5
16	14.0	12.0	16.0	14.5	21.5	20.0	27.0	22.5	23.0	19.0	20.5	18.5
17	15.5	11.5	18.0	14.0	20.0	18.0	27.5	23.5	25.5	22.5	22.0	19.0
18	17.5	13.0	19.5	15.0	21.0	17.5	27.0	24.5	27.0	24.5	20.5	19.0
19	17.0	13.5	20.5	16.5	23.0	18.5	27.5	24.5	26.0	23.0	20.0	19.0
20	13.5	11.0	22.0	17.5	24.0	21.0	29.5	25.5	26.0	22.0	20.5	18.0
21	10.5	9.0	23.0	19.0	23.0	18.5	30.0	26.5	26.0	22.5	19.0	17.5
22	9.0	8.0	22.5	20.0	18.5	16.5	30.5	27.5	26.5	23.5	17.5	15.5
23	9.5	7.0	---	---	16.5	14.5	30.5	27.5	27.0	24.0	15.5	14.5
24	9.0	7.5	---	---	15.0	13.5	28.5	26.5	26.5	24.5	17.0	15.0
25	9.0	6.0	---	---	17.5	13.5	27.5	24.5	26.5	23.0	17.5	16.0
26	10.0	6.5	---	---	18.5	15.5	25.0	22.0	26.5	23.5	19.0	17.0
27	11.5	8.0	---	---	21.5	17.0	21.5	20.0	24.5	22.5	18.5	17.0
28	13.0	9.0	---	---	21.5	18.5	22.5	18.5	25.0	21.0	18.5	16.0
29	12.5	10.5	---	---	22.5	20.0	23.5	19.5	25.5	21.5	18.0	16.0
30	15.0	10.5	---	---	22.5	20.5	24.0	19.5	25.0	21.5	15.5	13.5
31	---	---	---	---	---	---	25.0	20.0	24.5	21.0	---	---
MONTH	18.0	2.0	---	---	---	---	30.5	16.5	27.0	15.5	25.0	13.5
YEAR	30.5	0.0										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO

LOCATION.--Lat 40°56'55", long 84°15'58", in SE 1/4 sec.15, T.1 S., R.5 E., Putnam County, at gaging station on left bank 200 ft upstream from bridge on U.S. Highway 224, 3.5 miles northeast of Fort Jennings, 6 miles upstream from Ottawa River, and 7.3 miles downstream from Jennings Creek.

DRAINAGE AREA.--332 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.
Water temperatures: October 1968 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,050 micromhos Nov. 26; minimum, 195 micromhos Apr. 21.
pH: Maximum, 9.4 Aug. 13, 14; minimum, 5.9 July 18.
Dissolved oxygen: Maximum, 15.0 mg/l on many days during October, January to August; minimum, 3.1 mg/l Sept. 1.
Water temperatures: Maximum, 30.0°C July 23; minimum, freezing point on many days during December to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO_3) (MG/L)	CARBONATE (CO_3) (MG/L)	DISSOLVED SULFATE (SO_4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
04...	1645	37	236	0	96	41	.6	1.8
12...	1620	--	--	--	--	--	--	--
24...	1000	56	242	16	130	72	.7	1.2
NOV.								
02...	1500	26	278	14	120	58	.7	1.6
22...	1500	24	322	0	160	84	.9	1.8
DEC.								
05...	1720	42	260	10	130	77	.7	2.6
16...	1115	2130	130	0	59	23	.3	8.3
JAN.								
02...	1030	575	160	6	71	24	.2	4.4
18...	1000	160	310	0	120	39	.3	4.3
FEB.								
10...	1440	68	340	6	150	39	.5	2.7
20...	1015	110	182	0	81	36	.3	3.4
MAR.								
03...	1100	2790	104	0	50	21	.3	11
27...	1330	143	268	0	120	35	.4	5.7
APR.								
03...	1315	160	248	0	110	32	.3	4.3
24...	1035	3400	110	0	38	8.2	.2	3.8
MAY								
16...	--	1290	148	0	52	15	.2	5.9
21...	1630	172	266	10	120	36	.4	2.4
JUNE								
06...	1215	--	--	--	--	--	--	--
18...	1930	76	272	14	120	41	.4	2.7
25...	2000	142	194	0	76	24	.3	10
JULY								
17...	0930	630	146	0	52	15	.5	7.6
31...	0900	26	308	0	120	53	1.0	1.4
AUG.								
07...	1300	82	220	0	110	46	1.0	2.3
31...	1300	21	278	0	140	72	1.3	1.7
SEP.								
10...	1030	31	302	0	180	87	1.4	1.1
18...	0840	80	225	11	91	63	1.2	2.4

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
05...	1010	18.5	34	62	5.7
27...	1525	18.0	53	60	8.6
NOV.					
16...	1010	14.5	25	36	2.4
DEC.					
16...	1245	7.0	2140	260	1500
JAN.					
20...	1510	1.5	200	9	4.9
FEB.					
16...	0950	.5	120	20	6.5
MAR.					
03...	1400	--	2840	388	2980
21...	1315	11.0	194	36	19
APR.					
22...	1530	10.0	5890	517	8220
MAY					
16...	1045	14.5	1340	391	1420
SEP.					
20...	1415	21.5	55	80	12

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-72): Maximum, 1,330 micromhos Feb. 2-4, 1971; minimum, 150 micromhos Feb. 20, 1971.
pH (1969-72): Maximum, 9.8 July 22, 1970; minimum, 5.9 July 18, 1972.
Dissolved oxygen (1969-72): Maximum, 15.0 mg/l on many days during 1969-72; minimum, 2.0 mg/l Aug. 5-7, 1971.
Water temperatures (1969-72): Maximum, 30.0°C July 1, Aug. 1, 1970, July 23, 1972; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since October 1968. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitation. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
04...	8.2	442	290	96	677	--	--
12...	--	--	--	--	--	1.5	14
24...	5.5	576	350	120	873	--	--
NOV.							
02...	7.2	528	370	120	855	--	--
22...	7.7	614	400	140	991	--	--
DEC.							
05...	11	562	380	150	905	--	--
16...	37	246	220	110	445	--	--
JAN.							
02...	19	360	250	110	510	--	--
18...	19	584	420	160	820	--	--
FEB.							
10...	12	646	470	180	991	--	--
20...	15	368	270	120	579	--	--
MAR.							
03...	49	290	180	95	406	--	--
27...	25	504	370	150	730	--	--
APR.							
03...	19	448	350	150	694	--	--
24...	17	188	150	60	300	--	--
MAY							
16...	26	256	200	79	410	--	--
21...	11	480	370	140	753	--	--
JUNE							
06...	--	--	--	--	--	<.5	7.0
18...	12	510	380	130	798	--	--
25...	45	356	280	120	579	--	--
JULY							
17...	34	286	200	80	429	--	--
31...	6.2	524	390	140	834	--	--
AUG.							
07...	10	418	290	110	678	--	--
31...	7.6	562	360	130	914	--	--
SEP.							
10...	4.9	656	400	150	1030	--	--
18...	11	528	340	140	840	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC.								
16...	1245	79	85	92	96	98	99	100
MAR.								
03...	1400	75	87	95	96	98	99	100
APR.								
22...	1530	80	93	96	98	99	100	--
MAY								
16...	1045	77	88	94	97	99	100	--

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	630	603	842	836	921	885	504	427	882	846	790	672
2	660	630	855	842	923	882	569	480	888	876	672	412
3	682	652	870	848	932	851	591	567	892	885	412	345
4	685	662	902	870	959	885	619	590	907	888	477	387
5	693	672	899	890	918	876	654	618	925	906	568	477
6	684	642	917	894	896	816	658	639	943	924	618	562
7	686	651	930	899	816	576	686	655	949	939	654	618
8	689	663	950	927	576	406	707	683	969	939	688	652
9	693	670	933	908	552	428	706	679	998	969	736	684
10	732	693	920	906	591	533	710	515	1030	990	745	717
11	759	730	926	903	582	546	515	482	1020	1000	765	735
12	760	718	956	926	581	504	535	485	1010	987	757	744
13	804	760	959	941	608	504	589	535	987	955	744	610
14	840	793	993	944	638	591	647	589	1020	963	670	487
15	877	840	1000	981	602	429	709	649	975	898	553	516
16	885	861	1010	993	446	432	---	---	898	747	746	545
17	890	863	999	967	507	446	---	---	747	519	602	565
18	876	863	947	930	574	507	866	850	519	495	640	602
19	884	865	980	944	630	574	878	844	528	493	662	640
20	906	881	990	974	682	621	868	781	580	523	674	662
21	912	891	978	942	721	640	787	761	618	577	697	674
22	896	865	980	968	723	669	761	704	652	618	711	693
23	876	852	984	959	702	667	716	655	714	652	726	705
24	873	853	1010	974	721	682	655	554	736	714	725	707
25	854	835	1030	1010	714	673	656	601	757	715	749	719
26	835	830	1050	1020	712	691	656	623	747	726	752	735
27	894	832	1030	975	718	693	685	656	744	724	738	723
28	887	872	996	912	778	702	732	685	748	718	737	712
29	876	860	926	891	894	771	754	730	747	721	735	676
30	860	840	914	897	869	656	813	745	---	---	676	665
31	840	816	---	---	663	433	846	813	---	---	665	611
MONTH	912	603	1050	836	959	406	878	427	1030	493	790	345

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	661	612	656	617	597	515	603	446	864	831	878	867
2	685	658	666	600	635	597	675	603	885	834	914	876
3	694	681	668	650	639	618	702	671	891	806	917	893
4	692	682	671	657	656	614	692	579	866	732	912	902
5	705	675	671	621	693	648	624	539	833	747	914	902
6	705	661	693	626	723	687	662	558	833	759	915	896
7	661	354	716	674	744	723	656	641	798	581	915	884
8	354	298	701	683	740	726	---	---	716	606	885	861
9	419	314	699	659	746	720	---	---	840	696	927	860
10	500	419	708	360	762	725	689	664	884	840	1040	906
11	606	500	443	348	744	699	698	687	902	860	1000	916
12	638	594	530	443	719	692	713	696	860	795	969	947
13	594	284	584	530	711	588	725	710	795	750	974	890
14	284	245	615	584	711	677	710	641	755	668	890	541
15	387	252	611	518	708	672	678	336	732	677	703	528
16	501	387	518	404	732	684	419	315	752	732	727	703
17	491	347	503	405	750	711	504	401	740	725	784	727
18	404	336	572	503	776	738	573	501	743	702	844	784
19	516	404	624	572	794	767	557	470	725	704	933	756
20	513	227	660	624	788	740	551	460	741	725	968	929
21	227	195	687	660	741	518	654	554	755	735	990	930
22	240	218	695	677	663	491	711	654	785	750	1030	893
23	258	230	704	683	644	540	722	707	786	753	893	767
24	360	258	716	704	606	573	749	717	780	753	815	767
25	456	360	761	716	594	564	749	731	818	770	855	804
26	528	456	795	750	636	594	750	726	821	770	828	590
27	567	527	750	707	662	636	777	743	818	786	593	465
28	588	567	740	720	695	657	803	765	827	798	555	491
29	618	588	750	723	711	689	806	773	837	768	566	501
30	644	615	747	713	705	413	818	780	836	752	525	491
31	---	---	737	546	---	---	843	797	914	827	---	---
MONTH	705	195	795	348	794	413	843	315	914	581	1040	465
YEAR	1050	195										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.5	8.3	7.8	8.0	7.9	7.6	7.6	8.0	7.8	8.4	8.2
2	7.7	7.5	8.2	7.9	8.0	7.9	7.7	7.5	8.0	7.9	8.2	7.9
3	7.7	7.5	8.1	7.8	8.0	7.9	7.8	7.6	8.0	7.9	7.9	7.8
4	7.9	7.6	8.1	7.7	8.0	7.8	7.8	7.6	8.1	7.9	7.9	7.8
5	8.2	7.7	7.9	7.7	7.9	7.8	7.9	7.6	8.1	8.0	8.0	7.9
6	8.3	7.8	7.8	7.7	7.8	7.5	7.9	7.5	8.1	8.0	8.0	7.9
7	8.2	7.8	7.9	7.7	7.6	7.3	7.9	7.6	8.1	8.0	8.1	8.0
8	8.2	7.9	7.9	7.8	7.3	7.2	7.9	7.5	8.0	7.9	8.2	8.1
9	8.2	8.0	7.8	7.8	7.3	7.2	7.6	7.4	8.0	8.0	8.2	8.1
10	8.1	7.9	7.9	7.8	7.4	7.3	7.6	7.3	8.3	7.9	8.3	8.1
11	8.1	7.7	7.9	7.8	7.8	7.3	7.7	7.5	8.0	7.9	8.4	8.2
12	8.5	7.8	7.9	7.8	7.7	7.7	7.7	7.5	8.0	7.8	8.4	8.2
13	8.5	8.2	7.9	7.8	7.7	7.6	7.8	7.6	8.0	7.9	8.5	7.9
14	8.5	8.2	7.9	7.7	7.8	7.6	7.8	7.5	8.1	7.8	8.0	7.9
15	8.5	8.2	7.9	7.6	7.6	7.3	7.9	7.5	8.1	8.0	7.9	7.7
16	8.5	8.2	7.8	7.7	7.5	7.5	---	---	8.1	7.9	7.8	7.5
17	8.5	8.2	8.1	7.6	7.7	7.5	---	---	7.9	7.8	7.8	7.5
18	8.4	8.1	8.2	7.9	7.8	7.5	7.8	7.6	7.8	7.8	7.9	7.8
19	8.4	8.0	8.1	7.9	7.9	7.8	7.8	7.5	7.9	7.8	7.9	7.8
20	8.4	8.2	8.0	7.8	8.0	7.9	7.8	7.5	8.0	7.9	8.0	7.9
21	8.4	7.9	8.1	7.9	8.0	7.7	7.9	7.8	8.1	8.0	8.0	7.9
22	8.2	8.0	8.2	8.0	8.0	7.9	7.9	7.8	8.2	8.0	8.1	7.9
23	8.0	7.8	8.1	8.0	8.0	8.0	7.9	7.8	8.2	8.1	8.1	8.0
24	7.8	7.7	8.1	8.0	8.0	7.9	7.9	7.5	8.2	8.2	8.1	8.0
25	7.8	7.7	8.1	7.9	7.9	7.9	7.9	7.9	8.3	8.2	8.2	8.0
26	7.8	7.7	8.1	7.8	7.9	7.9	8.0	7.8	8.4	8.2	8.2	8.1
27	8.0	7.7	7.9	7.6	8.0	7.9	7.9	7.8	8.4	8.3	8.2	8.1
28	8.0	7.7	8.0	7.6	8.0	7.9	7.9	7.8	8.4	8.3	8.2	8.1
29	8.0	7.7	7.9	7.6	8.0	7.8	8.0	7.9	8.5	8.4	8.2	8.0
30	8.0	7.8	8.0	7.6	7.8	7.6	7.9	7.9	---	---	8.0	8.0
31	8.1	7.8	---	---	7.6	7.5	8.0	7.9	---	---	8.0	7.9
MONTH	8.5	7.5	8.3	7.6	8.0	7.2	8.0	7.3	8.5	7.8	8.5	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.5	7.7	7.6	7.5	7.3	7.7	7.4	8.8	8.4	8.8	8.1
2	8.2	7.9	7.8	7.7	7.6	7.4	7.8	7.7	8.7	8.3	8.4	7.8
3	8.2	8.1	7.8	7.7	7.8	7.5	7.8	7.6	8.5	8.0	8.0	7.7
4	8.2	8.1	7.8	7.5	7.9	7.6	7.6	7.5	8.2	7.7	8.1	7.7
5	8.3	8.2	7.9	7.8	8.0	7.5	7.5	7.5	8.2	7.6	8.1	7.7
6	8.3	8.1	8.0	7.9	8.1	7.8	7.8	7.5	8.0	7.7	8.2	7.7
7	8.2	7.5	8.0	7.8	8.2	7.6	7.8	7.6	8.0	7.6	8.5	7.7
8	7.8	7.7	8.0	7.9	8.5	7.7	---	---	7.8	7.5	8.2	7.8
9	7.8	7.7	8.2	7.8	8.5	7.9	---	---	8.4	8.0	8.3	7.7
10	7.8	7.5	7.7	6.4	8.3	7.7	7.6	7.7	9.0	7.9	8.4	7.7
11	7.6	7.6	6.4	6.3	8.7	7.8	8.3	7.5	9.2	8.4	8.6	7.9
12	7.8	7.5	6.4	6.3	9.0	8.2	8.7	7.7	9.3	8.8	8.5	8.1
13	7.6	6.0	6.5	6.4	8.8	7.9	8.5	8.1	9.4	8.7	8.8	8.0
14	7.4	7.4	6.5	6.3	8.7	7.8	8.1	7.7	9.4	8.8	8.3	7.3
15	7.5	7.3	6.4	6.1	8.5	8.2	7.8	7.2	9.1	8.4	7.6	7.3
16	7.5	7.4	7.7	6.0	8.2	7.8	7.3	7.0	9.1	8.2	7.7	7.5
17	7.5	7.5	7.8	7.5	8.1	7.6	7.4	7.3	9.2	8.6	7.8	7.5
18	7.5	7.5	8.0	7.7	8.3	7.7	7.7	5.9	9.2	8.7	7.7	7.5
19	7.6	7.5	8.1	7.9	8.4	7.8	7.5	7.3	8.9	8.2	8.2	7.6
20	7.6	7.4	8.2	7.9	8.4	8.4	7.7	7.4	8.7	7.8	8.6	7.9
21	7.4	7.3	8.4	7.9	8.3	7.3	8.0	7.6	8.9	7.9	8.7	8.0
22	7.4	7.3	8.5	8.0	7.6	7.3	8.3	7.8	8.9	8.2	9.2	8.4
23	7.4	7.4	8.7	8.1	7.6	7.5	8.7	7.9	9.1	8.3	8.8	8.4
24	7.5	7.4	8.8	8.1	7.6	7.5	8.7	8.1	9.1	8.4	8.6	8.2
25	7.6	7.5	8.8	8.0	7.8	7.5	8.9	8.1	9.1	8.2	8.5	8.1
26	7.6	7.6	8.8	7.9	7.9	7.6	8.5	7.9	9.1	8.5	8.2	7.5
27	7.6	7.5	8.8	7.9	8.0	7.7	8.2	7.8	8.7	8.2	7.5	7.3
28	7.6	7.5	8.8	7.9	8.1	7.8	8.6	7.7	9.0	7.9	7.8	7.4
29	7.7	7.5	8.5	7.9	8.1	7.8	8.6	7.8	9.0	8.0	7.8	7.3
30	7.7	7.6	8.0	7.5	8.0	7.3	8.8	7.9	9.0	8.0	7.6	7.2
31	---	---	7.5	7.3	---	---	9.0	8.2	8.9	8.0	---	---
MONTH	8.3	6.0	8.8	6.0	9.0	7.3	9.0	5.9	9.4	7.5	9.2	7.2
YEAR	9.4	5.9										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.3	4.5	11.3	5.7	11.6	10.7	11.5	10.8	15.0	15.0	15.0	12.5
2	5.8	4.9	10.3	5.7	12.6	11.1	11.5	11.4	15.0	14.7	12.5	10.1
3	6.5	5.0	11.6	5.8	13.2	11.8	11.9	11.5	15.0	14.3	12.1	10.6
4	8.5	5.0	12.6	6.9	13.2	12.1	11.9	11.7	15.0	14.5	12.5	11.9
5	13.2	6.1	10.5	7.9	12.5	11.5	12.7	11.9	15.0	15.0	13.3	12.4
6	15.0	7.3	8.7	7.6	12.0	10.7	13.0	9.6	15.0	15.0	13.7	10.7
7	15.0	8.4	10.6	8.6	10.7	9.1	12.9	8.9	15.0	14.7	13.7	12.8
8	15.0	9.8	10.3	9.5	9.3	9.0	13.0	12.4	15.0	14.2	13.8	12.5
9	15.0	9.5	10.2	9.5	9.5	9.1	12.7	11.9	15.0	14.6	15.0	13.3
10	12.9	8.8	10.4	9.4	9.4	8.6	11.9	11.4	15.0	14.2	15.0	13.1
11	14.7	8.6	10.5	9.4	9.1	8.4	11.4	11.1	14.8	13.5	15.0	13.8
12	13.9	9.5	10.1	9.0	9.6	9.0	11.5	11.3	14.9	13.4	14.8	10.1
13	12.8	8.6	9.9	8.3	9.7	9.4	11.6	11.1	14.4	13.4	11.5	10.3
14	12.9	8.0	10.3	8.4	10.2	9.7	12.9	11.6	15.0	12.7	11.3	10.6
15	13.4	8.0	9.8	7.7	9.8	8.4	13.3	10.2	14.9	13.4	11.8	7.7
16	13.1	7.7	8.4	7.2	8.4	7.6	---	---	14.1	12.1	11.6	7.5
17	12.3	7.4	11.5	7.5	9.7	8.4	---	---	13.5	11.7	11.7	11.2
18	9.8	6.7	12.4	7.9	10.9	9.7	12.2	11.9	12.9	12.0	12.2	11.4
19	12.0	6.8	10.5	7.3	11.3	10.9	12.1	11.9	13.8	10.6	13.4	12.2
20	11.3	7.4	11.2	8.2	11.4	10.9	12.6	12.1	15.0	11.1	13.0	11.7
21	10.9	6.6	12.3	9.0	11.8	10.9	13.1	12.6	15.0	14.4	12.2	10.5
22	8.4	5.9	12.7	12.3	12.5	11.8	13.2	12.6	15.0	13.6	11.0	10.1
23	7.4	5.2	13.8	11.1	12.7	12.2	13.1	12.6	15.0	14.8	13.1	10.7
24	6.7	4.8	13.2	11.3	12.5	11.7	13.3	12.8	15.0	14.1	14.7	12.4
25	6.5	5.1	13.0	11.3	12.0	11.7	14.4	11.7	15.0	14.3	15.0	13.2
26	7.4	5.8	12.5	11.0	11.7	10.6	14.9	11.1	15.0	14.8	15.0	12.9
27	7.2	6.0	11.9	10.7	10.6	10.0	15.0	14.2	15.0	15.0	15.0	12.3
28	7.6	5.7	11.9	10.3	10.8	10.1	15.0	13.2	15.0	15.0	15.0	12.4
29	7.7	5.8	10.9	9.9	11.9	10.6	14.6	9.9	15.0	15.0	13.5	11.4
30	8.0	5.6	11.6	9.9	11.8	10.1	15.0	11.0	---	---	13.4	11.4
31	9.1	5.2	---	---	10.8	10.4	15.0	11.0	---	---	12.8	11.7
MONTH	15.0	4.5	13.8	5.7	13.2	7.6	15.0	8.9	15.0	10.6	15.0	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	11.8	9.1	7.9	7.3	6.8	6.2	5.7	13.2	7.6	8.6	3.1
2	14.2	11.9	10.2	7.5	7.2	6.7	5.7	5.6	10.1	5.6	6.8	3.7
3	15.0	12.7	10.7	7.8	6.7	5.9	6.2	5.5	7.6	4.3	7.6	4.0
4	15.0	12.4	11.1	8.4	6.0	5.5	6.6	5.9	7.9	4.0	7.5	4.6
5	15.0	12.5	14.7	9.1	6.5	5.3	6.8	6.6	7.4	5.1	7.2	4.6
6	14.1	11.2	15.0	9.4	7.1	5.5	6.9	6.1	6.0	5.0	7.9	4.9
7	11.5	9.9	14.4	8.5	8.3	5.8	6.9	6.6	5.6	4.9	9.6	5.0
8	12.6	11.5	10.4	8.4	10.6	5.9	---	---	5.9	4.5	7.3	4.3
9	12.5	11.6	11.0	8.6	11.4	6.5	---	---	10.3	5.4	8.2	4.7
10	11.6	10.8	10.4	8.7	12.1	6.3	8.5	7.1	15.0	8.2	9.0	5.9
11	11.0	10.3	8.9	8.5	15.0	6.0	11.3	5.7	14.4	9.8	9.2	5.5
12	10.3	8.3	8.5	8.3	13.6	8.7	13.6	6.3	14.5	7.9	8.3	4.9
13	9.4	6.7	8.3	8.0	10.0	6.6	10.9	6.7	15.0	8.4	9.8	5.0
14	7.2	6.5	8.2	8.0	11.2	5.9	7.0	5.0	14.5	8.4	6.7	4.8
15	7.4	7.2	8.0	7.5	8.4	5.7	5.8	4.1	11.4	4.9	5.6	4.9
16	8.3	7.4	7.9	7.6	8.4	5.5	5.6	5.1	11.3	5.5	5.8	5.0
17	8.6	8.1	8.0	7.6	8.9	5.9	5.8	5.5	12.5	4.6	5.8	4.5
18	8.3	7.9	7.6	7.2	10.2	6.2	6.3	5.7	11.6	4.8	6.1	5.3
19	8.2	7.9	7.2	6.9	11.2	5.9	6.1	5.1	7.9	3.2	7.9	3.7
20	8.1	7.8	7.6	6.8	9.5	5.0	6.2	5.9	10.2	3.6	9.8	6.3
21	9.2	8.1	8.0	6.6	6.7	5.1	6.7	5.8	10.2	4.3	11.0	6.9
22	9.3	9.1	8.5	6.1	6.8	5.8	8.7	5.2	13.4	6.3	14.1	7.1
23	9.1	8.7	8.3	6.3	7.3	6.8	13.2	4.9	10.4	7.7	13.1	8.9
24	9.2	8.7	12.0	5.4	7.7	7.3	11.5	6.0	8.2	7.5	10.8	7.8
25	9.8	9.2	12.5	6.7	7.5	7.0	15.0	6.5	7.7	6.7	9.5	7.3
26	9.7	9.3	13.0	6.9	7.0	6.7	13.2	7.3	7.0	6.7	7.7	5.4
27	9.3	9.1	14.0	7.2	6.9	6.4	11.6	6.1	7.0	6.6	6.0	5.3
28	9.1	8.8	12.7	6.5	7.1	5.8	13.8	6.1	7.2	6.8	6.3	5.9
29	8.8	8.4	9.2	5.8	7.1	5.6	12.8	7.0	7.2	6.8	6.3	5.5
30	8.8	8.3	6.2	4.7	6.4	5.5	14.9	7.1	7.2	6.9	7.5	5.9
31	---	---	6.7	5.7	---	---	15.0	7.3	9.1	7.1	---	---
MONTH	15.0	6.5	15.0	4.7	15.0	5.0	15.0	4.1	15.0	3.2	14.1	3.1
YEAR	15.0	3.1										

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	21.0	16.0	13.0	2.5	1.5	4.0	3.0	0.5	0.0	6.5	2.5
2	24.0	21.0	16.0	14.0	2.0	0.5	4.0	3.5	0.5	0.0	6.0	3.5
3	23.0	20.5	14.0	10.5	1.5	0.0	3.5	3.0	0.5	0.0	3.5	1.5
4	22.0	20.5	10.5	8.0	1.0	0.0	3.5	1.5	0.0	0.0	2.0	1.5
5	21.0	18.0	10.0	7.5	2.5	1.0	1.5	0.0	0.5	0.0	2.0	1.5
6	19.0	17.0	9.0	5.5	4.0	2.5	0.5	0.0	0.0	0.0	1.0	0.0
7	17.0	14.0	5.5	2.5	6.5	4.0	0.5	0.0	0.5	0.0	1.0	0.0
8	14.0	12.5	4.0	2.5	6.5	6.0	0.5	0.0	0.5	0.0	3.5	0.5
9	14.5	13.0	3.5	3.0	7.0	6.5	1.0	0.5	0.5	0.0	3.0	1.0
10	14.0	12.5	5.5	3.0	9.5	7.0	3.5	1.0	0.5	0.0	1.0	0.0
11	14.0	11.0	6.5	3.5	9.5	7.0	3.5	3.0	0.5	0.0	2.0	0.0
12	13.5	10.5	7.0	4.5	7.0	6.0	3.5	2.5	1.0	0.5	5.5	0.5
13	13.5	11.5	7.0	5.5	6.0	5.0	4.0	1.5	0.5	0.0	7.5	5.5
14	15.0	12.5	9.5	5.5	5.5	4.0	1.5	0.0	0.5	0.0	6.0	5.0
15	16.0	13.0	11.5	9.0	8.5	5.5	0.0	0.0	0.5	0.0	5.5	4.5
16	17.0	14.5	10.5	8.5	8.5	7.5	---	---	0.5	0.0	5.0	4.0
17	17.5	15.5	11.5	9.0	7.5	4.5	---	---	0.5	0.0	5.5	5.0
18	17.5	15.0	12.5	10.0	4.5	2.5	0.5	0.0	0.5	0.0	5.0	4.0
19	18.0	15.0	12.5	7.5	2.5	2.0	1.0	0.5	0.5	0.0	6.5	3.5
20	18.0	14.5	7.5	6.0	3.5	2.0	0.5	0.5	1.0	0.0	9.0	5.5
21	18.0	16.0	6.0	3.5	3.5	3.0	0.5	0.5	0.5	0.0	10.5	7.5
22	18.0	17.0	3.5	2.0	3.0	1.5	1.0	0.5	1.0	0.0	10.5	6.5
23	18.0	17.0	2.0	1.0	2.5	1.5	2.0	1.0	0.5	0.0	6.5	4.0
24	18.0	17.0	2.0	1.0	4.0	2.5	3.5	1.5	0.5	0.5	6.0	3.0
25	17.5	16.5	2.5	1.0	4.0	3.0	3.0	0.0	1.0	0.5	7.0	4.0
26	17.5	16.0	3.0	2.0	6.0	4.0	0.5	0.0	0.5	0.0	8.0	4.5
27	17.5	15.5	3.0	2.5	8.0	6.0	0.5	0.0	1.0	0.5	8.5	6.0
28	17.5	15.0	3.5	2.5	8.0	4.0	0.0	0.0	1.5	0.5	8.5	6.0
29	17.0	14.5	3.0	2.5	4.0	3.0	1.0	0.0	2.5	1.5	7.0	4.5
30	17.5	14.5	3.0	2.0	5.5	3.0	0.5	0.0	---	---	6.0	4.0
31	17.0	15.0	---	---	5.5	4.0	0.5	0.0	---	---	7.5	5.0
MONTH	24.0	10.5	16.0	1.0	9.5	0.0	4.0	0.0	2.5	0.0	10.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	18.5	16.0	17.0	15.0	23.5	19.0	25.0	23.5	26.0	22.5
2	6.0	5.0	19.5	17.0	20.0	16.5	22.5	21.5	25.0	23.0	24.0	20.0
3	7.5	4.5	18.5	16.0	22.5	18.5	23.0	21.0	24.5	23.5	20.5	18.5
4	9.0	6.5	16.5	15.0	25.0	21.0	21.5	19.5	24.5	21.0	22.0	19.0
5	10.0	6.5	18.0	13.5	25.0	21.5	20.5	18.5	24.0	21.0	22.0	18.0
6	13.0	8.5	20.0	16.0	24.5	22.5	21.0	18.0	22.5	21.0	22.0	18.5
7	10.5	2.0	19.0	16.5	25.0	21.0	20.5	18.5	21.5	20.5	22.5	19.0
8	1.5	0.5	16.5	13.0	24.5	21.0	---	---	20.5	19.0	22.0	21.0
9	5.5	2.0	14.0	11.5	24.5	21.5	---	---	20.0	17.5	22.0	19.0
10	7.5	5.5	13.5	11.0	22.5	19.0	25.0	24.0	21.5	17.0	20.5	15.0
11	10.0	7.5	15.0	13.0	22.0	17.5	27.5	23.0	21.5	18.0	21.5	19.0
12	15.0	9.5	17.0	14.5	21.5	18.5	28.5	24.5	23.0	19.5	22.5	21.0
13	16.5	12.0	17.0	15.5	21.5	20.0	27.0	25.0	25.5	21.0	24.0	21.5
14	16.5	14.5	18.5	15.0	25.0	20.5	26.0	23.5	26.5	22.5	22.5	20.0
15	16.0	14.5	17.0	15.0	24.5	23.0	25.0	22.5	25.5	23.5	21.0	19.0
16	15.5	13.5	16.0	14.5	23.5	21.5	23.0	21.0	25.0	20.5	21.0	19.0
17	14.5	12.0	17.0	14.5	22.5	19.5	24.0	22.0	27.0	23.5	23.0	20.0
18	15.5	13.5	19.5	16.5	23.5	19.0	25.5	19.5	28.5	25.0	22.5	20.5
19	15.5	14.5	21.5	19.0	26.0	21.0	24.5	23.0	27.0	25.0	21.5	20.0
20	15.5	12.0	22.5	19.0	25.5	23.0	26.5	23.0	26.5	22.5	21.5	18.5
21	12.0	10.0	24.0	19.5	24.5	18.0	28.5	25.0	27.0	22.5	20.5	18.0
22	11.0	10.0	24.5	21.0	18.0	17.0	29.5	27.0	26.0	24.0	19.5	17.0
23	12.5	10.5	25.0	21.0	17.0	14.5	30.0	26.5	27.5	24.0	17.5	16.0
24	12.5	10.5	26.0	22.0	15.0	14.0	28.5	26.0	27.0	24.5	18.5	16.5
25	11.5	9.5	26.0	22.0	18.0	14.5	28.0	24.5	27.0	23.5	19.5	18.0
26	12.5	10.5	25.5	21.0	19.5	16.5	26.0	23.0	27.0	24.5	20.0	19.0
27	13.5	12.0	25.0	21.0	22.5	18.5	23.5	22.0	25.0	22.5	20.0	18.0
28	15.0	12.5	24.5	20.5	22.5	20.0	24.0	20.5	25.5	21.0	18.0	16.5
29	15.5	14.0	24.5	21.0	22.5	20.5	24.0	20.5	26.5	22.0	18.0	17.0
30	17.5	13.5	22.0	19.5	21.5	19.0	25.0	20.5	26.0	22.0	17.0	14.5
31	---	---	19.5	16.0	---	---	26.0	21.5	25.5	21.5	---	---
MONTH	17.5	0.5	26.0	11.0	26.0	14.0	30.0	18.0	28.5	17.0	26.0	14.5
YEAR	30.0	0.0										

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO

LOCATION.--Lat 40°45'18", long 84°11'41", NW 1/4 sec. 29, T.3 S., R.6 E., Allen County, at gaging station on left bank at upstream side of bridge on State Highway 81 at Allentown, 0.3 mile downstream from Kessler Run, and 1.5 miles upstream from McBride Ditch. Continuous water-quality recorder on right bank at downstream side of State Highway 81 Bridge.

DRAINAGE AREA.--160 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1969 to September 1972.
Water temperatures: March 1969 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT.									
13...	0945	--	--	--	--	--	--	--	--
23...	1400	25	2	0	290	160	1.1	31	140
31...	1850	21	2	0	430	220	1.3	47	210
NOV.									
11...	1515	21	1	0	440	230	1.6	66	290
18...	1516	21	3	0	500	180	1.5	53	240
DEC.									
04...	1700	22	2	0	400	140	1.3	48	212
15...	1600	482	104	0	130	44	.5	12	54
JAN.									
10...	1140	475	88	0	95	48	.3	12	53
15...	1630	34	126	0	270	250	1.4	32	140
FEB.									
10...	1315	22	2	0	380	210	1.2	44	190
16...	1530	75	80	0	210	150	.9	21	91
MAR.									
14...	--	938	47	0	300	130	.9	34	150
15...	1015	650	97	0	94	32	.2	12	55
APR.									
03...	1600	70	212	0	260	96	.7	19	83
11...	1050	293	128	0	130	50	.3	16	73
MAY									
16...	1200	761	112	0	75	24	.3	9.9	44
24...	1215	37	208	0	340	190	.9	21	93
JUNE									
06...	1110	46	128	0	240	110	.7	25	112
06...	1120	--	--	--	--	--	--	--	--
20...	1120	30	164	0	420	240	1.1	30	130
JULY									
24...	1200	35	110	0	520	150	1.2	14	61
AUG.									
16...	1330	29	181	0	380	200	1.6	24	104
25...	1100	33	45	0	430	200	1.4	24	108
SEP.									
19...	1115	992	82	0	51	13	.3	2.5	11

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-71): Maximum, 2,590 micromhos Jan. 23, 1971; minimum, 277 micromhos Feb. 23, 1971.
Water temperatures (1969-71): Maximum, 31.5°C June 29, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since March 1969. Minimum recorded specific conductance value of 180 micromhos occurred May 18, 19, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
13...	--	--	--	--	--	--	.9	9.0
23...	830	310	310	.2	1400	4.9	--	--
31...	1250	440	440	.4	2000	4.8	--	--
NOV.								
11...	1350	470	470	.6	2220	4.7	--	--
18...	1320	490	490	--	1940	5.0	--	--
DEC.								
04...	1040	420	420	.4	1680	4.8	--	--
15...	400	250	160	--	661	7.7	--	--
JAN.								
10...	378	220	150	--	583	6.9	--	--
15...	1020	380	280	--	1780	7.9	--	--
FEB.								
10...	1190	440	440	--	1860	4.7	--	--
16...	768	350	280	--	1220	7.8	--	--
MAR.								
14...	880	400	360	--	1410	7.5	--	--
15...	360	230	150	--	545	6.8	--	--
APR.								
03...	758	420	250	--	1180	6.8	--	--
11...	480	300	190	--	732	8.0	--	--
MAY								
16...	316	210	120	--	464	8.0	--	--
24...	1050	470	300	--	1550	8.0	--	--
JUNE								
06...	804	410	300	--	1230	6.7	--	--
06...	--	--	--	--	--	--	4.9	5.0
20...	1220	450	320	--	1920	7.0	--	--
JULY								
24...	1170	500	410	--	1690	6.5	--	--
AUG.								
16...	1110	450	300	--	1850	6.7	--	--
25...	1180	460	420	--	1760	6.2	--	--
SEP.								
19...	196	120	53	--	291	7.9	--	--

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1740	1510	2030	1860	1680	1600	898	625	1580	1390	1770	1070
2	1660	1440	1980	1800	1680	1600	1100	898	1650	1440	1070	412
3	1620	1440	1860	1730	1740	1680	1090	1030	1830	1570	541	425
4	1680	1480	2050	1750	1690	1640	1150	1010	1620	1380	703	541
5	1660	1480	2140	1880	1740	1580	1140	987	1710	1560	828	703
6	1720	1470	2140	1980	1580	946	1330	1140	1690	1560	1280	828
7	1870	1600	2160	1750	996	850	1390	1290	1630	1500	1290	879
8	1770	1650	2310	1660	909	700	1790	1390	1690	1560	1330	979
9	1730	1450	2330	2160	1230	794	1720	861	1930	1690	1380	1040
10	1480	1200	2230	2020	1250	978	861	519	1890	1750	1440	1110
11	1830	1480	2270	2000	1240	778	745	549	1970	1780	1480	1210
12	1900	1690	2250	2050	1140	802	871	745	1890	1740	1540	1180
13	1870	1680	2130	1970	1200	1140	1230	871	2410	1790	1220	570
14	1790	1380	2220	2010	1300	1190	1260	1120	2310	1450	570	461
15	1740	1540	2170	2020	1380	708	1400	1120	1480	1100	614	501
16	1830	1680	2220	1990	714	537	1440	1340	1280	1070	780	614
17	1790	1660	2180	1920	952	590	1400	1340	1480	1200	772	731
18	1850	1720	2200	1920	1310	952	1650	1320	1490	1380	885	765
19	1820	1640	2070	1690	1240	952	1990	1360	1650	1410	895	841
20	1900	1660	2150	1840	1350	1220	1910	1400	1410	1140	966	895
21	1890	1700	2070	1910	1320	1170	1490	1360	1520	1250	1320	966
22	1860	1340	1920	1740	1230	1080	1440	1130	1390	1300	1260	937
23	1480	1270	1920	1820	1350	1230	1130	987	1630	1390	1040	953
24	---	---	2200	1800	1370	1290	987	841	1760	1590	1060	950
25	1780	1710	2200	1320	1330	1280	963	866	1800	1640	1340	1030
26	1830	1640	1510	1310	1300	1160	1320	893	1800	1650	1130	1100
27	1830	1660	1420	1100	1450	1220	1410	1320	1840	1700	1140	1010
28	1860	1680	1620	1250	1500	1290	1510	1410	1860	1770	1150	995
29	1920	1790	1700	1450	1550	1350	1750	1480	1860	1690	1300	1030
30	2070	1840	1710	1620	1560	545	1800	1200	---	---	1080	934
31	2080	1860	---	---	625	480	1450	1330	---	---	1260	969
MONTH	2080	1200	2330	1100	1740	480	1990	519	2410	1070	1770	412

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1210	1100	---	---	926	736	1610	1490	---	---	---	---
2	2260	1160	---	---	1120	870	1630	1510	---	---	---	---
3	2280	1060	---	---	1260	935	1660	739	---	---	---	---
4	2050	1040	---	---	1460	1050	950	806	---	---	---	---
5	1380	1040	---	---	1390	1150	1020	846	---	---	---	---
6	1410	365	---	---	1580	1220	1360	1030	---	---	---	---
7	---	---	---	---	1510	1110	1510	1370	---	---	---	---
8	---	---	---	---	1720	1510	1560	1400	---	---	---	---
9	---	---	---	---	1810	1530	1530	1430	1790	1490	---	---
10	---	---	---	---	1740	1260	1610	1460	1790	1560	---	---
11	---	---	---	---	1830	1280	1600	1440	---	---	---	---
12	---	---	---	---	1860	1630	1600	1440	---	---	---	---
13	---	---	---	---	1910	1080	1650	1510	---	---	---	---
14	---	---	---	---	1520	1030	1680	1490	---	---	---	---
15	---	---	---	---	1720	1510	1590	1400	---	---	---	---
16	---	---	552	464	1530	1170	1510	1060	---	---	---	---
17	---	---	785	552	1780	1400	1490	1250	---	---	---	---
18	---	---	837	751	1910	1670	1540	1350	---	---	---	---
19	---	---	1030	837	1930	1740	1390	968	---	---	348	266
20	---	---	1320	962	1940	1590	1280	1120	---	---	627	348
21	---	---	1310	1050	1780	706	1460	1280	---	---	946	627
22	---	---	1440	1110	1290	873	1450	1280	---	---	1480	946
23	---	---	1550	1410	1720	1290	---	---	---	---	1740	1230
24	---	---	1670	1510	1990	1560	---	---	---	---	1330	861
25	---	---	1580	1470	1710	1570	---	---	---	---	1490	1210
26	---	---	1670	1510	1740	1630	---	---	---	---	1220	546
27	---	---	1630	1500	1760	1520	---	---	---	---	568	497
28	---	---	1880	1490	1750	1590	---	---	---	---	756	568
29	---	---	1770	1650	1760	1490	---	---	---	---	741	542
30	---	---	1840	662	1560	1290	---	---	---	---	542	472
31	---	---	798	586	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	1990	706	---	---	---	---	---	---

04187500 OTTAWA RIVER AT ALLENTOWN, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	26.0	23.5	18.0	15.5	6.0	5.5	6.0	4.0	4.0	1.5	13.0	10.0
2	25.5	22.5	19.0	16.5	6.0	5.5	7.0	5.5	6.5	4.0	10.0	4.5
3	24.5	22.5	16.5	12.5	7.0	6.0	7.0	5.0	7.0	4.5	4.5	2.5
4	24.0	22.0	12.5	10.0	7.5	7.0	7.0	5.0	4.5	1.5	3.5	2.5
5	22.0	19.5	12.0	9.5	9.0	7.5	5.0	3.0	2.0	1.5	2.5	1.0
6	20.5	18.0	11.0	8.0	10.0	9.0	3.5	2.5	2.0	1.5	3.5	0.0
7	18.0	15.5	8.0	6.0	9.5	8.0	5.0	2.5	2.0	1.5	6.5	3.5
8	16.0	14.0	7.0	4.5	9.0	7.0	6.5	3.5	2.0	1.5	5.0	2.5
9	17.0	15.5	6.5	6.0	8.5	8.0	6.5	5.5	2.5	1.5	3.5	1.0
10	16.5	14.0	9.0	6.5	12.5	8.5	5.5	3.5	2.5	1.5	6.0	1.5
11	15.5	13.0	10.5	7.5	13.0	8.5	6.0	5.0	4.5	2.5	10.5	4.0
12	16.0	12.5	11.0	8.5	8.0	7.0	6.0	5.0	7.0	4.5	11.0	9.0
13	16.5	13.5	11.5	10.0	7.0	6.0	6.5	5.5	7.5	7.0	9.0	7.0
14	18.0	15.5	13.5	10.0	7.5	6.5	5.5	2.5	8.0	6.0	7.0	4.5
15	19.0	15.5	16.0	13.5	7.5	6.0	3.0	1.5	7.0	6.0	6.5	5.0
16	20.0	18.0	14.0	12.0	10.0	7.0	1.5	1.0	7.0	4.5	8.0	6.5
17	20.0	18.0	15.0	12.0	9.5	4.0	1.0	1.0	8.0	4.5	8.0	7.0
18	20.0	18.5	15.5	13.0	7.5	2.5	1.5	1.0	8.0	6.0	7.0	6.0
19	20.5	17.5	13.0	8.5	5.0	2.0	7.0	1.5	6.0	3.5	9.5	5.5
20	20.5	17.0	8.5	5.0	6.5	3.5	7.5	6.5	4.0	1.5	11.5	7.0
21	20.5	18.0	5.5	2.5	6.5	4.0	7.0	6.5	6.0	4.0	13.0	10.0
22	20.5	19.5	5.5	3.0	5.5	3.5	9.5	6.5	6.5	4.0	12.5	7.5
23	20.5	19.5	6.0	4.5	7.5	5.0	8.0	6.0	4.5	3.0	7.5	5.5
24	---	---	6.0	5.0	8.5	5.5	7.5	5.5	6.0	4.5	7.5	4.0
25	19.5	18.5	7.5	5.5	10.0	8.5	9.5	3.0	8.0	5.5	8.5	5.0
26	20.0	18.0	7.0	6.0	11.0	7.5	3.5	2.5	7.5	5.5	9.5	5.5
27	19.5	17.0	7.5	5.5	7.5	4.0	2.5	1.5	6.5	4.0	10.5	6.5
28	19.5	17.0	6.5	3.5	7.0	4.5	3.5	2.0	9.0	6.0	10.5	6.5
29	19.0	16.0	5.5	4.0	6.5	5.0	2.0	1.5	12.0	8.0	8.0	6.5
30	19.5	16.5	5.5	4.0	10.0	6.5	3.0	1.5	---	---	8.5	5.5
31	19.5	17.0	---	---	7.5	5.5	1.5	1.5	---	---	10.5	6.0
MONTH	26.0	12.5	19.0	2.5	13.0	2.0	9.5	1.0	12.0	1.5	13.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	7.0	---	---	18.0	14.0	27.0	22.0	---	---	---	---
2	10.0	6.5	---	---	21.0	16.0	25.5	23.5	---	---	---	---
3	11.5	8.5	---	---	23.0	19.0	24.0	21.5	---	---	---	---
4	12.5	7.5	---	---	25.5	21.0	22.0	20.0	---	---	---	---
5	16.0	10.0	---	---	25.0	20.5	22.5	19.0	---	---	---	---
6	14.5	5.0	---	---	24.0	22.0	22.5	18.5	---	---	---	---
7	---	---	---	---	25.0	20.0	22.0	19.0	---	---	---	---
8	---	---	---	---	25.0	21.0	25.0	20.0	---	---	---	---
9	---	---	---	---	25.0	21.5	25.0	22.5	20.5	18.5	---	---
10	---	---	---	---	23.0	19.5	26.5	23.0	20.5	18.5	---	---
11	---	---	---	---	22.5	17.0	29.0	25.0	---	---	---	---
12	---	---	---	---	22.5	18.5	30.0	26.0	---	---	---	---
13	---	---	---	---	24.0	22.0	28.0	26.0	---	---	---	---
14	---	---	---	---	27.0	22.5	29.0	25.0	---	---	---	---
15	---	---	---	---	25.5	23.5	27.0	24.5	---	---	---	---
16	---	---	15.5	14.5	24.5	21.0	27.0	24.0	---	---	---	---
17	---	---	17.5	14.0	24.0	20.0	28.0	21.0	---	---	---	---
18	---	---	21.0	15.5	24.5	20.0	29.5	25.5	---	---	---	---
19	---	---	22.5	17.5	27.0	22.0	29.0	25.0	---	---	20.5	20.5
20	---	---	22.5	19.0	26.0	24.5	31.0	26.5	---	---	21.5	19.0
21	---	---	24.5	19.5	24.0	19.0	31.5	28.0	---	---	21.5	19.0
22	---	---	25.0	21.0	19.0	17.0	31.5	28.0	---	---	20.5	18.0
23	---	---	25.5	20.5	17.0	15.5	---	---	---	---	18.5	16.0
24	---	---	26.5	21.5	17.0	15.0	---	---	---	---	20.5	18.0
25	---	---	26.0	21.5	20.0	16.0	---	---	---	---	22.0	20.5
26	---	---	25.5	20.5	23.0	18.5	---	---	---	---	21.5	20.0
27	---	---	24.5	20.0	26.0	21.0	---	---	---	---	20.0	17.5
28	---	---	24.5	20.0	24.5	22.5	---	---	---	---	19.0	17.5
29	---	---	25.0	21.0	25.0	22.5	---	---	---	---	19.0	16.5
30	---	---	22.5	18.5	24.0	22.0	---	---	---	---	16.5	13.0
31	---	---	18.5	15.0	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	27.0	14.0	---	---	---	---	---	---

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO

LOCATION.--Lat 41°01'08", long 84°17'20", in NE 1/4 sec.28, T.1 N., R.5 E., Putnam County, on left bank at old bridge abutment, 0.2 mile upstream from bridge on State Route 114, 2.5 miles upstream from Blanchard River, 4.5 miles downstream from Ottawa River, and 0.8 mile east of Cloverdale.

DRAINAGE AREA.--713 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1967 to September 1972.
Water temperatures: June 1967 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,490 micromhos Nov. 22, 29, June 20; minimum, 303 micromhos Apr. 14, 15.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.							
04...	1415	140	0	160	74	.7	20
13...	1230	166	0	220	120	1.2	15
13...	1245	--	--	--	--	--	--
NOV.							
01...	1050	210	0	210	100	.8	5.0
22...	1320	129	0	320	140	1.1	32
DEC.							
02...	0945	169	0	190	95	.8	17
16...	1600	118	0	72	27	.3	12
JAN.							
03...	1245	180	0	90	31	.3	10
17...	1700	242	0	160	60	.4	14
MAR.							
15...	1340	125	0	76	30	.3	11
27...	1230	204	11	140	53	.4	9.3
APR.							
06...	1045	190	8	140	52	.4	8.6
24...	1600	106	0	44	11	.2	5.0
MAY							
11...	1345	111	0	55	16	.2	8.4
29...	1300	229	10	190	69	.5	4.5
JUNE							
01...	1000	170	0	100	38	.4	9.5
06...	1415	--	--	--	--	--	--
22...	1400	192	0	490	34	.9	11
JULY							
17...	1000	138	0	62	22	.6	12
31...	1445	220	4	180	99	1.3	6.1
AUG.							
07...	0930	216	0	160	72	1.3	5.5
29...	0900	174	0	310	150	1.7	9.6
SEP.							
07...	1215	176	0	290	150	2.0	7.8
18...	1500	88	0	65	21	.6	8.0

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-72): Maximum, 1,870 micromhos Jan. 13, 1970; minimum, 222 micromhos Feb. 20, 1971.
pH (1969-70): Maximum, 10.5 Dec. 4-6, 18-26, 1969, Jan. 2, 6, 1970; minimum, 4.5 Oct. 3, 1969.
Water temperatures (1969-71): Maximum, 29.5°C July 2, 1970, Aug. 11, 1971, June 20, 1972; minimum, freezing point on many days during December 1969, January 1970, and January to March 1971.

REMARKS.--Continuous water-quality recorder operated since June 1967. Maximum recorded water temperatures of 31.0°C occurred Aug. 23, 24, 1968. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
04...	88	598	310	200	900	--	--
13...	67	764	370	230	1190	--	--
13...	--	--	--	--	--	<.5	13
NOV.							
01...	22	696	380	210	1130	--	--
22...	140	934	430	320	1470	--	--
DEC.							
02...	77	638	350	210	1060	--	--
16...	51	294	210	110	482	--	--
JAN.							
03...	46	414	280	130	606	--	--
17...	64	638	430	230	937	--	--
MAR.							
15...	49	352	240	140	514	--	--
27...	41	570	380	190	828	--	--
APR.							
06...	38	530	350	180	808	--	--
24...	22	226	160	73	324	--	--
MAY							
11...	37	262	180	89	394	--	--
29...	20	608	390	180	928	--	--
JUNE							
01...	42	416	270	130	646	--	--
06...	--	--	--	--	--	.6	9.0
22...	49	1020	670	510	1310	--	--
JULY							
17...	55	336	220	110	488	--	--
31...	27	678	380	190	1020	--	--
AUG.							
07...	24	576	340	160	885	--	--
29...	42	918	420	280	1350	--	--
SEP.							
07...	34	882	400	260	1330	--	--
18...	35	254	150	78	376	--	--

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	1150	1090	1320	1130	471	432	---	---	939	702
2	---	---	1160	1110	1130	1010	543	462	---	---	749	522
3	---	---	1160	1120	1010	1000	645	543	---	---	522	423
4	---	---	1150	1130	1010	938	690	621	---	---	483	423
5	---	---	1220	1130	944	926	726	675	---	---	597	483
6	---	---	1250	1210	1050	937	765	633	---	---	636	597
7	---	---	1300	1230	1050	810	786	738	---	---	690	636
8	1030	1020	1310	1280	852	528	819	744	---	---	795	690
9	1020	1010	1340	1280	618	531	816	768	---	---	822	750
10	1070	1020	1340	1260	987	618	816	660	---	---	801	777
11	1200	1050	1330	1260	735	711	663	537	---	---	858	801
12	1190	1150	---	---	762	687	582	540	---	---	849	750
13	1190	1130	1370	1360	687	654	645	579	1280	1260	750	510
14	1130	1100	1370	1340	660	627	---	---	1270	1160	672	507
15	1120	1080	1420	1320	663	501	---	---	1220	1140	534	501
16	1230	1080	1470	1420	501	480	---	---	1190	963	579	531
17	1270	1150	1470	1430	528	483	---	---	963	732	669	579
18	1170	1050	1440	1390	627	528	---	---	732	627	711	669
19	1110	1060	1440	1400	711	627	924	894	687	627	738	705
20	1090	1040	1420	1360	774	711	903	837	750	661	762	738
21	1190	1090	1440	1370	807	774	876	828	891	714	804	762
22	1210	1180	1490	1440	834	760	903	801	912	882	813	795
23	1240	1190	1460	1400	837	788	813	714	927	846	888	795
24	1330	1250	1430	1410	---	---	780	702	918	846	873	813
25	1250	1100	1420	1390	---	---	744	693	921	879	846	825
26	1100	1030	1390	1330	---	---	795	714	939	879	873	828
27	1040	990	1330	1300	---	---	777	705	963	915	927	864
28	1000	948	1350	1310	---	---	---	---	996	957	918	864
29	1020	960	1490	1330	951	924	---	---	972	936	873	819
30	1090	1020	1390	1190	945	618	---	---	---	---	825	795
31	1100	1070	---	---	735	465	---	---	---	---	843	759
MONTH	---	---	1490	1090	1320	465	---	---	---	---	939	423

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	774	732	---	---	710	560	765	594	1110	1050	1350	1330
2	813	741	---	---	677	614	792	657	1120	1100	1330	1300
3	810	789	---	---	716	671	855	792	1170	1110	1310	1250
4	816	804	---	---	719	650	1070	720	1160	1110	1350	1310
5	856	804	---	---	785	719	711	618	1160	978	1360	1340
6	---	---	---	---	803	779	657	633	978	942	1400	1350
7	---	---	---	---	---	---	690	639	960	876	1380	1310
8	---	---	---	---	---	---	696	672	912	846	1320	1310
9	---	---	---	---	---	---	726	696	855	816	1320	1310
10	---	---	---	---	---	---	795	720	1040	855	1300	1280
11	594	576	---	---	---	---	879	801	1110	1030	1290	1140
12	642	582	---	---	---	---	942	865	1160	1080	1250	1160
13	567	387	---	---	---	---	960	942	1180	1100	1340	1210
14	375	303	---	---	921	783	942	846	1180	1120	1220	489
15	375	303	---	---	915	855	---	---	1180	1070	681	546
16	543	378	443	425	882	753	546	444	1070	1060	690	642
17	579	387	491	443	879	750	546	486	1130	1070	690	642
18	408	387	572	494	879	855	627	546	1160	1130	696	387
19	510	417	635	572	951	870	633	495	1140	1110	1060	444
20	---	---	674	632	1490	813	684	537	1120	1090	957	360
21	---	---	713	677	1090	732	669	624	1180	1120	573	414
22	---	---	782	701	771	645	705	669	1210	1120	768	573
23	---	---	782	746	678	645	789	705	1220	1170	819	768
24	---	---	800	746	645	600	846	789	1220	1160	834	765
25	---	---	797	770	690	645	915	846	1290	1220	834	741
26	---	---	836	773	747	678	945	912	1340	1290	858	666
27	---	---	914	836	846	750	1010	897	1350	1330	678	507
28	---	---	932	899	942	846	1090	1010	1400	1350	540	504
29	---	---	932	890	912	876	1110	1080	1390	1350	543	423
30	---	---	914	749	975	765	1090	1010	1350	1310	516	474
31	---	---	1080	683	---	---	1050	975	1330	1310	---	---
MONTH	---	---	---	---	---	---	1110	444	1400	816	1400	360
YEAR	1490	303										

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1971

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.5	6.7	---	---	7.8	7.5	---	---	---	---
2	---	---	7.5	7.0	---	---	7.7	7.6	---	---	---	---
3	---	---	7.5	7.3	---	---	8.2	7.6	---	---	---	---
4	---	---	---	---	---	---	7.9	7.8	---	---	---	---
5	---	---	---	---	---	---	8.1	7.8	---	---	---	---
6	---	---	---	---	---	---	8.3	7.7	---	---	---	---
7	---	---	---	---	7.9	7.6	---	---	---	---	---	---
8	---	---	---	---	7.9	7.6	---	---	---	---	---	---
9	---	---	---	---	8.0	7.5	---	---	---	---	---	---
10	---	---	---	---	7.8	7.5	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	7.9	7.3	---	---	---	---	---	---	---	---	---	---
14	7.6	7.0	---	---	---	---	---	---	---	---	---	---
15	7.9	6.9	---	---	---	---	---	---	---	---	8.4	7.3
16	7.7	7.2	---	---	---	---	---	---	---	---	7.3	7.2
17	9.0	7.2	---	---	---	---	---	---	---	---	7.3	7.2
18	7.8	7.3	---	---	---	---	---	---	---	---	7.5	7.2
19	8.0	7.1	---	---	---	---	---	---	---	---	8.0	7.3
20	7.9	7.1	---	---	---	---	---	---	---	---	7.9	7.3
21	7.7	7.2	---	---	---	---	---	---	---	---	7.7	7.3
22	7.5	7.4	---	---	---	---	---	---	---	---	7.3	7.2
23	7.5	7.3	---	---	---	---	---	---	---	---	7.9	7.2
24	7.3	7.2	---	---	---	---	---	---	---	---	8.5	7.9
25	7.4	7.1	---	---	---	---	---	---	---	---	8.5	8.1
26	7.5	7.1	---	---	---	---	---	---	---	---	8.5	8.1
27	7.5	7.1	---	---	---	---	---	---	---	---	8.2	8.0
28	7.5	7.1	---	---	---	---	---	---	---	---	8.0	7.6
29	7.6	6.9	---	---	8.3	8.1	---	---	---	---	7.8	7.6
30	7.6	6.9	---	---	8.2	7.5	---	---	---	---	8.8	7.6
31	7.3	6.8	---	---	7.6	7.5	---	---	---	---	9.1	8.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.3	---	---	---	---	---	---	8.7	8.2	8.4	7.8
2	8.9	8.5	---	---	---	---	---	---	8.6	8.3	8.0	7.7
3	9.4	8.7	---	---	---	---	---	---	8.6	8.2	8.1	7.7
4	8.7	8.5	---	---	---	---	---	---	8.3	7.9	8.1	7.7
5	8.8	8.4	---	---	---	---	---	---	8.0	7.7	8.2	7.8
6	---	---	---	---	---	---	7.9	7.5	7.8	7.6	8.5	7.8
7	---	---	---	---	---	---	8.1	7.8	7.8	7.7	8.6	7.9
8	---	---	---	---	---	---	---	---	7.8	7.7	8.3	7.8
9	---	---	---	---	---	---	---	---	7.8	7.4	8.3	7.7
10	---	---	---	---	---	---	---	---	8.2	7.3	8.5	7.8
11	7.7	---	---	---	---	---	---	---	8.2	7.6	8.4	7.9
12	7.6	7.2	---	---	---	---	---	---	8.4	7.7	8.1	7.7
13	---	---	---	---	---	---	---	---	8.2	7.7	8.0	7.6
14	---	---	---	---	8.8	6.9	---	---	8.4	7.6	8.2	7.3
15	---	---	---	---	9.2	8.0	---	---	8.1	7.6	7.5	7.3
16	---	---	7.6	7.3	9.7	8.2	7.6	7.3	8.7	7.5	7.6	7.4
17	---	---	7.8	7.4	9.5	8.4	7.6	7.3	8.8	8.0	7.5	7.4
18	---	---	7.6	7.4	10.2	8.4	7.6	7.3	8.6	8.0	7.9	7.3
19	---	---	---	---	10.2	8.4	7.6	7.3	8.2	7.8	7.2	6.7
20	---	---	---	---	9.3	7.8	7.7	7.3	8.4	7.9	6.7	6.5
21	---	---	---	---	8.3	6.5	7.6	7.2	8.5	7.8	6.7	6.6
22	---	---	---	---	7.4	7.0	7.9	7.5	8.2	7.8	7.2	6.7
23	---	---	---	---	7.6	7.2	8.1	7.7	8.1	7.6	7.6	7.0
24	---	---	8.4	6.8	7.8	7.5	8.1	8.0	8.3	7.6	7.7	7.3
25	---	---	---	---	8.0	7.6	8.4	8.0	8.4	7.8	7.1	6.9
26	---	---	---	---	7.9	7.7	8.5	8.2	7.8	7.5	6.9	6.5
27	---	---	---	---	7.9	7.6	8.3	8.0	7.7	7.4	6.6	6.4
28	---	---	---	---	8.0	7.8	8.6	7.8	8.3	7.6	6.8	6.5
29	---	---	---	---	8.4	7.6	8.6	8.1	8.2	7.7	6.8	6.4
30	---	---	---	---	7.7	7.6	8.7	8.1	8.4	7.7	6.6	6.4
31	---	---	---	---	---	---	8.7	8.1	8.4	7.8	---	---
MONTH	---	---	---	---	---	---	---	---	8.8	7.3	8.6	6.4

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	5.1	3.4	6.5	6.0	12.2	11.3	---	---	---	---
2	---	---	4.8	3.7	7.1	6.5	12.4	12.2	---	---	---	---
3	---	---	5.2	3.8	7.3	6.8	12.6	12.4	---	---	---	---
4	---	---	6.2	3.9	7.4	6.7	12.5	12.4	---	---	---	---
5	---	---	6.2	4.4	7.2	6.2	12.9	12.4	---	---	---	---
6	---	---	5.7	4.5	6.5	5.8	13.4	12.4	---	---	---	---
7	---	---	7.4	5.2	6.1	5.3	13.2	12.9	---	---	---	---
8	7.0	5.3	7.2	6.3	5.6	5.2	13.3	12.8	---	---	---	---
9	7.6	4.3	7.3	6.3	6.8	5.6	12.9	12.4	---	---	---	---
10	6.9	3.9	7.1	6.2	6.3	5.5	12.8	12.1	---	---	---	---
11	5.2	4.3	6.7	6.2	6.4	6.1	12.3	12.2	---	---	---	---
12	5.6	4.0	---	---	6.3	6.0	12.4	12.2	---	---	---	---
13	6.7	4.3	5.9	4.9	7.3	6.3	12.5	12.3	12.9	12.1	---	---
14	6.9	4.5	5.5	4.1	8.0	7.3	---	---	14.3	12.0	---	---
15	5.7	3.9	4.8	3.7	7.9	6.6	---	---	14.2	13.1	11.9	10.0
16	4.4	3.2	4.8	3.4	7.2	6.7	---	---	14.8	13.8	12.8	9.6
17	5.2	3.7	4.5	3.3	7.8	7.0	---	---	14.3	13.6	9.8	9.4
18	5.2	3.5	4.7	3.0	8.1	7.7	---	---	14.2	10.2	10.2	9.8
19	4.7	2.9	4.1	2.8	8.2	7.8	12.1	11.1	---	---	10.7	9.7
20	4.0	2.7	4.9	3.3	8.4	7.6	13.1	10.5	---	---	9.7	8.1
21	4.6	2.2	6.3	4.4	7.9	7.5	13.2	12.5	---	---	8.4	6.4
22	3.1	2.2	6.5	5.0	8.0	7.6	13.0	12.4	---	---	8.6	6.4
23	2.8	1.8	7.0	5.8	7.8	7.2	13.1	12.6	---	---	10.4	7.1
24	2.5	2.0	6.8	5.9	---	---	13.0	12.1	---	---	11.6	9.8
25	2.9	1.9	6.9	6.1	---	---	13.0	11.9	---	---	11.5	9.7
26	2.7	2.3	6.6	5.8	---	---	12.7	11.4	---	---	12.1	8.9
27	2.8	2.4	6.1	5.4	---	---	---	---	---	---	10.3	7.9
28	3.5	2.5	6.2	5.4	---	---	---	---	---	---	13.8	7.7
29	3.5	3.1	5.5	5.1	10.5	9.4	---	---	---	---	12.7	8.5
30	3.9	3.2	6.2	5.1	11.6	10.3	---	---	---	---	14.7	8.6
31	4.1	3.1	---	---	11.7	11.2	---	---	---	---	14.2	7.6
MONTH	---	---	7.4	2.8	11.7	5.2	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.9	7.8	---	---	6.6	4.8	4.2	3.9	9.4	6.9	8.0	4.3
2	12.8	8.4	---	---	6.7	5.2	5.2	4.2	8.0	5.4	5.4	4.7
3	14.9	8.9	---	---	8.5	3.8	4.6	4.1	8.3	4.5	6.6	4.7
4	12.6	6.9	---	---	8.2	3.2	4.6	3.4	6.9	5.1	6.0	4.5
5	12.9	5.8	---	---	10.8	4.1	3.8	3.6	6.8	5.2	6.7	5.1
6	---	---	---	---	9.0	5.6	4.8	3.8	5.8	4.6	7.5	5.1
7	---	---	---	---	---	---	5.7	4.8	5.3	3.7	8.3	4.5
8	---	---	---	---	---	---	6.6	5.7	4.6	3.6	4.5	2.1
9	---	---	---	---	---	---	7.1	6.0	5.6	3.7	4.0	1.7
10	---	---	---	---	---	---	8.0	6.1	6.1	4.0	3.8	2.4
11	9.3	8.8	---	---	---	---	6.8	5.6	5.9	4.2	4.2	1.9
12	8.8	6.2	---	---	---	---	5.6	3.5	6.0	3.3	2.2	1.2
13	6.4	2.5	---	---	---	---	4.6	2.3	5.1	2.8	1.7	0.9
14	3.9	2.2	---	---	---	---	3.1	2.5	6.6	2.5	2.5	0.9
15	4.2	3.6	---	---	---	---	---	---	5.7	2.3	2.0	1.5
16	4.8	3.2	8.9	7.3	---	---	5.1	3.6	8.4	2.0	1.7	1.3
17	5.5	4.7	11.2	9.1	---	---	3.7	3.2	9.7	4.3	1.3	0.9
18	5.5	4.7	11.1	10.3	---	---	3.3	3.2	6.9	4.6	4.4	0.9
19	4.6	3.4	10.4	9.7	---	---	3.8	3.3	5.6	3.3	2.9	1.8
20	---	---	11.0	9.7	---	---	4.0	3.6	4.9	2.7	2.2	1.0
21	---	---	10.5	9.4	---	---	3.7	3.2	5.5	1.3	3.0	1.7
22	---	---	13.2	9.3	7.2	3.3	4.4	3.3	11.9	1.4	4.5	2.6
23	---	---	13.1	9.9	7.2	4.4	5.4	4.2	11.3	3.9	5.3	3.5
24	---	---	13.3	4.4	7.2	4.9	5.4	4.8	6.3	3.7	8.1	4.4
25	---	---	---	---	7.6	6.0	8.0	6.4	6.9	3.6	6.6	3.4
26	---	---	---	---	6.4	3.8	8.5	5.9	5.1	2.9	3.4	1.7
27	---	---	---	---	3.8	3.3	8.9	6.8	4.2	2.8	1.7	1.0
28	---	---	---	---	3.9	3.0	15.0	6.4	7.4	3.2	3.7	1.4
29	---	---	---	---	4.4	2.6	15.0	8.1	7.5	4.0	3.3	2.5
30	---	---	11.8	8.1	5.1	4.1	15.0	10.2	7.7	4.3	3.2	2.0
31	---	---	8.4	3.9	---	---	15.0	8.5	7.2	4.4	---	---
MONTH	---	---	---	---	---	---	15.0	2.3	11.9	1.3	8.3	0.9

STREAMS TRIBUTARY TO LAKE ERIE

04188200 AUGLAIZE RIVER AT CLOVERDALE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.0	13.0	4.0	1.0	6.0	3.5	---	---	5.0	1.5
2	---	---	16.0	13.5	3.5	1.0	5.0	4.0	---	---	7.0	5.0
3	---	---	15.0	10.5	2.5	1.0	5.5	4.0	---	---	5.5	3.5
4	---	---	10.5	8.5	3.0	1.5	5.5	4.0	---	---	3.5	2.5
5	---	---	9.0	6.5	4.0	2.0	4.5	3.0	---	---	4.0	2.0
6	---	---	8.5	7.0	5.5	3.5	5.0	1.0	---	---	2.5	2.0
7	---	---	7.0	4.0	7.5	5.0	2.0	0.5	---	---	2.5	2.0
8	16.0	15.0	4.5	3.5	8.0	7.0	3.0	0.5	---	---	4.0	2.5
9	15.5	14.5	6.0	2.5	9.0	7.5	2.0	0.5	---	---	2.5	1.5
10	15.0	14.0	5.0	4.0	11.5	8.0	4.0	1.0	---	---	3.0	1.5
11	14.0	12.0	4.5	3.5	12.0	9.0	4.5	3.5	---	---	4.5	1.5
12	14.0	12.0	---	---	9.0	7.5	4.5	3.5	---	---	7.5	4.5
13	13.5	12.0	6.5	4.5	9.0	8.0	4.5	3.5	1.5	0.5	6.5	5.0
14	14.5	11.5	6.5	4.5	8.0	7.5	---	---	3.0	1.0	6.0	5.0
15	14.5	12.5	9.0	6.5	10.0	7.5	---	---	3.0	1.0	6.0	4.5
16	16.0	14.5	9.0	7.0	10.5	9.5	---	---	3.5	1.0	6.5	5.5
17	18.5	14.0	9.0	7.5	10.0	8.5	---	---	2.0	0.5	7.0	6.5
18	16.5	14.0	12.0	8.5	8.5	6.0	---	---	7.0	2.0	6.5	6.0
19	16.5	13.5	12.0	9.0	6.5	5.0	1.5	1.0	4.5	2.5	7.0	5.5
20	17.0	16.0	9.0	7.0	9.0	5.5	2.0	1.0	5.5	2.0	9.0	7.0
21	18.0	14.0	7.0	5.0	7.0	6.5	2.0	1.0	2.5	1.5	11.0	9.0
22	18.0	17.0	5.0	3.5	7.0	5.5	1.5	1.0	4.5	1.5	11.0	9.5
23	18.5	17.0	3.5	2.5	7.0	6.5	1.5	1.0	4.5	1.5	9.5	5.0
24	18.0	15.5	3.0	2.0	---	---	4.0	1.5	2.0	1.0	5.5	4.5
25	18.0	15.0	3.5	2.5	---	---	4.0	1.5	5.0	1.0	6.5	5.0
26	18.0	15.0	4.0	2.5	---	---	2.5	0.5	3.5	1.0	7.5	6.0
27	17.5	15.5	4.5	3.0	---	---	---	---	4.5	1.0	8.5	7.5
28	17.0	14.5	4.5	3.5	---	---	---	---	2.0	1.0	9.5	8.0
29	16.5	13.5	4.5	3.0	6.0	3.5	---	---	2.5	1.0	9.5	7.5
30	16.5	13.0	4.5	3.5	6.5	4.5	---	---	---	---	7.5	5.0
31	16.0	13.5	---	---	7.0	5.5	---	---	---	---	7.0	5.0
MONTH	---	---	16.0	2.0	12.0	1.0	---	---	---	---	11.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.5	---	---	17.5	16.5	22.0	20.5	24.0	23.0	25.5	21.5
2	6.5	5.0	---	---	19.5	17.0	22.5	21.5	24.0	23.0	23.0	20.0
3	7.0	4.5	---	---	21.0	19.5	22.5	21.5	24.0	23.0	21.5	19.5
4	9.0	7.0	---	---	22.5	20.5	22.0	20.5	23.0	22.0	22.0	19.0
5	9.5	7.5	---	---	23.5	22.0	20.5	19.5	22.5	21.5	21.5	19.0
6	---	---	---	---	23.5	23.0	20.0	19.5	22.5	20.5	22.5	18.5
7	---	---	---	---	---	---	20.5	19.5	21.5	21.0	22.5	18.5
8	---	---	---	---	---	---	21.0	19.5	21.0	19.0	21.5	20.5
9	---	---	---	---	---	---	22.0	21.5	19.5	18.5	22.5	19.0
10	---	---	---	---	---	---	23.5	22.0	20.0	18.0	21.0	18.0
11	10.0	9.0	---	---	---	---	25.5	23.0	20.5	19.0	21.5	19.0
12	13.5	10.0	---	---	---	---	26.5	24.5	21.5	19.5	21.5	20.5
13	15.5	12.5	---	---	---	---	26.5	25.0	23.0	20.5	23.0	21.0
14	16.0	15.0	---	---	22.5	20.0	25.0	24.0	25.0	22.0	21.5	19.5
15	16.0	14.5	---	---	22.5	21.5	---	---	24.5	23.0	20.5	19.0
16	16.0	14.5	14.5	14.0	21.5	19.5	21.5	20.5	24.5	21.5	20.0	19.0
17	14.5	12.5	15.0	14.0	19.5	18.0	23.0	21.5	25.5	23.0	21.5	19.5
18	15.0	14.0	17.0	15.0	19.5	17.0	24.0	22.5	26.5	24.5	21.5	19.5
19	15.5	15.0	19.0	17.0	23.0	19.0	24.0	22.0	25.5	24.0	20.5	19.5
20	---	---	19.0	18.5	24.5	22.0	24.0	23.0	25.5	23.0	20.5	18.0
21	---	---	20.5	19.0	25.5	18.0	26.0	24.5	26.0	23.0	19.5	19.0
22	---	---	21.5	20.0	19.0	14.5	27.5	26.0	25.5	23.5	19.0	17.5
23	---	---	21.5	20.0	17.5	16.0	27.5	26.5	26.0	23.5	18.0	16.5
24	---	---	24.5	20.5	16.0	15.5	27.5	25.5	26.0	24.0	17.5	16.5
25	---	---	24.0	23.0	17.0	15.5	25.0	25.0	26.0	23.5	19.0	17.5
26	---	---	24.0	22.5	19.0	17.0	25.5	23.0	26.0	24.0	19.5	18.5
27	---	---	23.5	22.5	21.0	19.0	23.0	21.5	24.0	22.5	19.5	18.5
28	---	---	24.0	22.0	21.5	21.0	23.0	21.0	24.5	21.5	18.5	16.5
29	---	---	24.0	22.0	22.5	21.5	23.0	21.0	25.5	21.5	17.5	17.0
30	---	---	22.5	20.0	22.0	21.0	23.5	21.0	25.5	21.5	17.5	15.0
31	---	---	20.5	17.5	---	---	24.5	22.0	25.0	21.0	---	---
MONTH	---	---	---	---	---	---	27.5	19.5	26.5	18.0	25.5	16.0

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO

LOCATION.--Lat 41°03'21", long 83°41'17", on east line of sec.10, T.1 N., R.10 E., Hancock County, at gaging station on left bank at upstream side of county road bridge, 2 miles west of Findlay, 3 miles downstream from Eagle Creek, and 3 miles upstream from Aurand Run.

DRAINAGE AREA.--346 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1972.
Water temperatures: July 1968 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,310 micromhos Feb. 13; minimum, 218 micromhos Sept. 19.
pH: Maximum, 8.5 May 24, June 11; minimum, 6.0 Jan. 5, Feb. 1.
Dissolved oxygen: Maximum, 14.5 mg/l Mar. 2; minimum, 1.1 mg/l May 30.
Water temperatures: Maximum, 30.0°C July 21-23; minimum, freezing point on several days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
10...	0630	13	94	0	150	38	.5	12
12...	1430	--	--	--	--	--	--	--
31...	0845	13	140	0	210	54	1.0	19
NOV.								
05...	0740	15	167	0	220	56	2.3	15
28...	1015	13	168	0	130	49	.7	4.4
DEC.								
04...	0920	10	216	0	200	70	1.6	4.8
07...	1230	102	194	0	140	49	.8	2.7
JAN.								
12...	1320	207	124	0	110	39	.4	11
19...	1300	27	186	0	180	120	.8	14
FEB.								
13...	0925	25	252	16	210	140	.9	4.1
20...	0905	26	146	0	130	51	.5	9.7
MAR.								
01...	1400	40	222	0	190	56	1.1	7.1
16...	1020	1170	111	0	86	20	.4	15
APR.								
02...	0825	95	196	8	180	39	.4	8.3
23...	0811	5120	78	0	43	8.5	.2	6.3
MAY								
04...	--	136	201	8	180	44	.6	9.6
JUNE								
09...	1700	--	--	--	--	--	--	--
14...	1400	210	170	4	140	33	.6	9.5
25...	0955	58	208	7	180	48	.8	10
JULY								
05...	1330	306	140	0	100	43	.8	13
30...	1205	19	172	6	170	64	1.3	5.5
AUG.								
13...	0800	16	174	0	190	72	3.8	9.4
24...	0805	136	174	0	100	48	1.3	7.2
SEP.								
07...	1340	18	171	0	180	71	2.7	12
14...	1630	2620	114	0	79	28	.6	4.5

EXTREMES.--Period of record:
Specific conductance (1969-72): Maximum, 1,500 micromhos or greater Jan. 26, 1970; minimum, 218 micromhos Sept. 19, 1972.
pH (1969-72): Maximum, 9.1 June 20, 1971; minimum, 3.1 May 13, 1970.
Dissolved oxygen (1969-72): Maximum, 14.5 mg/l Mar. 2, 1972; minimum, 0.0 mg/l June 18, July 2, 3, 1970.
Water temperatures (1969-72): Maximum, 31.0°C June 28, 1971; minimum, freezing point on several days during winter periods.

REMARKS.--Continuous water-quality recorder operated since July 1968. Maximum recorded pH of 9.3 occurred Sept. 17, 1968. Maximum recorded dissolved oxygen concentrations of 14.9 mg/l occurred Jan. 21, 1969. Maximum recorded water temperatures of 33.0°C occurred Aug. 27, 28, Sept. 5, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
10...	51	454	190	110	663	--	--
12...	--	--	--	--	--	<.5	9.0
31...	84	652	250	140	947	--	--
NOV.							
05...	66	634	270	130	953	--	--
28...	20	456	250	110	715	--	--
DEC.							
04...	21	644	320	140	963	--	--
07...	12	486	300	140	752	--	--
JAN.							
12...	50	440	260	160	615	--	--
19...	63	744	360	230	1070	--	--
FEB.							
13...	18	838	460	230	1260	--	--
20...	43	472	270	150	725	--	--
MAR.							
01...	31	632	360	180	906	--	--
16...	67	384	250	160	531	--	--
APR.							
02...	37	556	370	200	823	--	--
23...	24	190	130	56	282	--	--
MAY							
04...	42	478	380	200	851	--	--
JUNE							
09...	--	--	--	--	--	.6	7.0
14...	42	462	310	180	695	--	--
25...	46	574	360	130	849	--	--
JULY							
05...	58	392	260	140	577	--	--
30...	24	504	300	150	766	--	--
AUG.							
13...	42	578	310	170	860	--	--
24...	32	372	260	120	568	--	--
SEP.							
07...	53	576	320	180	858	--	--
14...	20	238	160	66	356	--	--

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	912	879	969	909	866	797	1050	887	923	854	1070	836
2	896	887	902	875	923	863	924	755	932	884	914	606
3	890	870	932	883	964	921	779	734	991	910	606	558
4	887	863	986	932	980	956	821	770	971	907	593	536
5	864	831	993	952	973	941	915	819	1040	971	701	581
6	906	864	994	956	950	728	941	905	1020	971	756	552
7	924	868	969	944	849	722	935	897	1030	989	815	736
8	927	890	981	889	936	785	981	929	1060	1030	837	774
9	914	797	905	875	989	944	1070	959	1090	1060	844	793
10	797	677	945	874	1010	984	963	867	1100	1060	924	828
11	759	683	945	914	998	935	852	779	1120	1080	871	851
12	890	749	968	907	990	945	779	693	1300	1090	874	826
13	948	885	968	932	1030	990	777	714	1310	1090	668	668
14	963	878	965	899	1040	815	827	767	1100	1040	629	414
15	878	776	971	899	909	842	864	819	1070	958	489	432
16	926	839	899	860	1020	881	873	858	958	800	551	489
17	933	912	936	851	1050	951	---	---	800	732	586	551
18	932	900	979	936	962	944	---	---	732	693	633	585
19	903	873	971	908	957	944	1060	1040	708	645	687	633
20	884	869	941	816	959	950	1040	938	745	670	739	687
21	915	878	898	811	962	917	949	883	751	716	760	724
22	960	897	911	892	945	908	947	901	836	729	771	711
23	984	848	912	900	939	897	904	854	893	827	762	738
24	852	816	912	885	929	888	859	719	880	843	786	753
25	866	852	954	891	917	869	742	656	891	840	787	756
26	857	831	951	925	902	867	715	652	886	812	781	744
27	882	834	933	777	884	863	769	706	860	836	774	742
28	893	875	777	714	927	869	826	766	1050	846	806	770
29	912	863	875	740	957	927	854	794	1070	1040	868	806
30	956	893	873	774	993	702	851	806	---	---	843	776
31	962	924	---	---	1020	857	886	848	---	---	839	804
MONTH	984	677	994	714	1050	702	1070	652	1310	645	1070	414

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	816	789	800	782	731	704	767	713	788	725	840	750
2	810	786	833	800	726	701	731	617	798	771	820	780
3	808	790	855	822	744	668	665	607	776	629	800	690
4	841	743	876	849	705	687	709	612	689	629	730	680
5	833	790	862	835	728	701	695	551	780	702	810	760
6	842	817	847	820	765	702	655	589	794	747	850	800
7	852	480	825	760	773	719	693	637	767	759	905	830
8	480	401	773	664	836	734	703	604	---	---	992	839
9	454	396	606	324	856	699	698	629	---	---	---	---
10	544	454	375	320	774	715	722	695	---	---	998	855
11	564	537	440	348	802	757	735	707	856	657	866	831
12	611	554	563	440	802	764	741	714	825	658	989	836
13	635	389	647	563	817	617	739	678	820	683	978	569
14	450	392	656	615	749	659	728	539	766	660	866	282
15	518	387	623	419	776	712	697	418	---	---	816	525
16	579	518	455	443	724	673	667	543	---	---	912	807
17	540	435	546	455	742	712	681	625	---	---	890	509
18	461	434	605	546	760	742	661	534	---	---	1020	404
19	599	461	660	605	785	758	643	498	---	---	420	218
20	597	294	686	659	814	785	682	643	---	---	531	264
21	308	279	710	686	833	602	720	682	---	---	614	531
22	308	242	725	701	875	827	736	668	---	---	696	359
23	351	245	728	711	870	832	752	701	---	---	756	396
24	486	351	734	720	866	828	732	539	---	---	737	639
25	597	486	771	717	859	832	660	546	---	---	776	677
26	668	597	782	738	847	791	732	660	---	---	762	433
27	713	666	782	738	822	765	761	708	---	---	433	388
28	732	704	755	723	813	748	766	699	730	660	510	418
29	733	707	743	713	818	492	763	697	780	690	552	493
30	763	733	725	608	780	577	762	696	800	680	501	430
31	---	---	725	653	---	---	738	675	800	730	---	---
MONTH	852	242	876	320	875	492	767	418	---	---	1020	218
YEAR	1310	218										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.1	7.0	7.4	7.0	7.9	7.7	8.0	7.6	7.6	6.0	8.0	7.5
2	7.1	7.0	7.2	7.2	7.9	7.5	7.9	7.6	7.6	7.5	8.0	7.4
3	7.4	7.1	7.5	7.4	7.8	7.5	7.7	7.4	7.6	7.4	7.5	7.3
4	7.2	7.1	7.5	7.4	7.8	7.7	7.5	7.3	7.8	7.6	7.4	7.2
5	7.3	7.1	7.6	7.4	7.8	7.7	7.6	6.0	7.8	7.6	7.9	7.3
6	7.2	7.1	7.6	7.5	7.8	7.5	7.5	7.2	7.9	7.6	7.9	7.4
7	7.2	7.1	7.6	7.5	7.6	7.0	7.6	7.4	7.9	7.7	7.9	7.6
8	7.2	7.1	7.7	7.6	7.3	7.1	7.5	7.3	7.8	7.6	7.9	7.6
9	7.1	6.9	7.6	7.5	7.4	7.1	7.6	7.3	7.7	7.5	7.8	7.6
10	7.3	6.9	7.5	7.4	7.5	7.3	8.0	7.4	7.7	7.5	7.8	7.5
11	7.5	7.3	7.6	7.4	7.5	7.1	7.9	7.6	7.6	7.6	7.8	7.5
12	7.5	7.2	7.4	7.3	7.5	7.2	8.3	7.6	7.6	7.4	7.8	7.6
13	7.2	7.0	7.4	7.3	7.6	7.4	7.6	7.4	7.6	7.5	8.1	7.5
14	7.2	6.8	7.4	7.2	7.5	7.1	7.6	7.3	7.8	7.5	7.8	7.5
15	7.2	7.0	7.5	7.3	7.5	7.1	7.6	7.3	7.9	7.6	7.6	7.4
16	7.1	6.9	7.6	7.4	7.8	7.4	7.4	7.3	7.9	7.6	7.6	7.5
17	7.0	6.9	7.5	7.3	7.9	7.5	---	---	7.8	7.5	7.7	7.5
18	7.2	6.9	7.4	7.2	7.8	7.6	---	---	7.6	7.3	7.7	7.5
19	7.1	7.0	7.6	7.3	7.8	7.4	7.5	7.4	7.6	7.4	7.9	7.5
20	7.1	7.0	7.6	7.4	7.7	7.2	7.5	7.2	7.7	7.3	7.7	7.5
21	7.0	6.8	7.9	7.6	7.3	7.1	7.6	7.4	8.0	7.5	7.8	7.6
22	7.1	6.7	7.9	7.8	7.4	7.1	7.6	7.4	7.8	7.5	7.9	7.6
23	7.3	7.0	7.8	7.6	7.5	7.2	7.9	7.4	7.7	7.5	7.9	7.7
24	7.0	6.8	7.8	7.6	7.5	7.3	7.8	7.6	7.8	7.6	7.8	7.7
25	7.0	6.9	7.6	7.4	7.5	7.2	8.1	7.6	7.9	7.7	7.8	7.7
26	6.9	6.7	7.7	7.4	7.5	7.2	7.7	7.5	8.1	7.8	7.9	7.7
27	6.9	6.7	7.9	7.5	7.5	7.2	7.6	7.4	8.1	7.9	7.9	7.6
28	7.0	6.8	7.9	7.4	7.5	7.3	7.7	7.5	8.1	7.9	7.9	7.6
29	6.9	6.7	8.2	7.7	7.3	7.0	7.6	7.3	8.0	7.8	7.8	7.5
30	7.0	6.7	7.9	7.5	7.7	7.0	7.8	7.4	---	---	7.9	7.6
31	7.0	6.8	---	---	7.8	7.6	7.7	7.4	---	---	7.9	7.7
MONTH	7.5	6.7	8.2	7.0	7.9	7.0	8.3	6.0	8.1	6.0	8.1	7.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.7	7.3	7.2	7.4	7.2	7.7	7.2	7.2	6.9	7.7	7.5
2	8.1	7.8	7.3	7.2	7.2	7.0	7.4	7.1	7.1	6.9	7.5	7.5
3	8.0	7.7	7.3	7.3	7.2	6.9	7.1	7.0	7.1	6.7	7.5	7.5
4	7.9	7.5	7.4	7.3	7.4	7.1	7.5	7.0	7.4	6.7	7.8	7.5
5	7.9	7.6	7.5	7.3	7.4	7.2	7.3	7.2	7.6	6.9	7.7	7.6
6	8.0	7.6	7.7	7.4	7.5	7.1	7.3	7.0	7.2	6.9	7.7	7.5
7	8.0	7.6	7.7	7.4	7.7	7.0	7.2	6.9	7.0	7.0	7.5	7.4
8	7.7	7.5	7.6	7.2	8.1	7.7	7.3	6.8	---	---	---	---
9	7.7	7.5	7.3	7.1	8.2	7.0	7.8	7.2	---	---	---	---
10	7.7	7.6	7.5	7.4	7.8	7.0	7.9	7.4	---	---	---	---
11	7.7	7.5	7.6	7.5	8.5	7.2	8.0	7.4	7.6	7.4	---	---
12	7.8	7.6	7.7	7.6	7.9	7.1	8.4	7.4	7.5	7.1	---	---
13	7.8	7.4	7.8	7.6	7.3	6.8	7.9	7.2	7.6	7.0	---	---
14	7.4	7.3	7.9	7.6	7.4	6.9	7.5	6.9	7.6	7.2	---	---
15	7.6	7.4	7.8	7.4	7.2	6.9	7.5	6.8	---	---	---	---
16	7.6	7.4	7.6	7.5	7.1	6.9	7.4	6.9	---	---	---	---
17	7.5	7.4	7.7	7.6	7.0	6.9	7.3	7.1	---	---	---	---
18	7.5	7.4	7.8	7.7	7.1	6.9	7.4	7.0	---	---	---	---
19	7.6	7.5	7.8	7.5	7.2	7.0	7.2	6.8	---	---	---	---
20	7.5	7.3	7.9	7.7	7.9	7.1	7.5	7.1	---	---	---	---
21	7.5	7.3	8.1	7.8	7.8	7.5	7.7	7.2	---	---	---	---
22	7.5	7.2	8.1	7.9	7.5	7.2	8.0	7.1	---	---	---	---
23	7.3	7.2	8.3	7.9	7.5	7.2	8.0	7.2	---	---	---	---
24	7.4	7.1	8.5	8.0	7.5	7.2	7.7	6.9	---	---	---	---
25	7.2	7.2	8.4	8.0	7.6	7.2	7.8	6.9	---	---	---	---
26	7.3	7.2	8.2	7.5	7.9	7.4	7.7	7.1	---	---	7.2	7.0
27	7.3	7.2	8.4	7.3	8.4	7.5	7.5	7.3	---	---	7.0	6.9
28	7.3	7.2	8.3	7.3	8.2	7.2	8.1	7.2	8.1	7.7	7.2	7.0
29	7.3	7.2	8.2	7.4	7.5	6.9	8.0	7.2	8.2	7.7	7.2	7.1
30	7.3	7.2	7.4	6.8	7.8	6.8	8.0	7.1	8.4	7.7	7.2	7.1
31	---	---	7.3	7.1	---	---	7.8	7.2	7.9	7.5	---	---
MONTH	8.1	7.1	8.5	6.8	8.5	6.8	8.4	6.8	---	---	---	---
YEAR	8.5	6.0										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.9	3.3	5.3	3.7	9.4	8.5	11.5	10.4	11.8	11.1	11.1	10.5
2	4.2	3.5	4.8	4.1	9.6	8.7	11.4	10.8	11.5	10.9	14.5	11.5
3	5.3	3.3	5.5	4.8	9.5	8.9	10.8	10.1	11.3	10.2	13.2	11.6
4	4.6	3.2	7.0	5.5	9.7	9.1	10.2	9.9	12.0	11.3	13.4	13.2
5	5.3	4.2	7.0	6.6	9.6	8.6	10.5	9.7	12.1	11.5	13.5	13.4
6	5.8	5.1	6.9	6.4	8.8	5.7	10.2	9.6	11.8	11.5	13.5	13.4
7	6.1	5.2	7.7	6.5	9.0	6.2	10.7	10.2	12.0	11.6	13.6	13.4
8	6.2	5.6	8.1	7.4	8.6	7.6	10.6	9.0	11.7	11.3	13.5	13.4
9	6.1	4.8	7.7	6.8	8.5	8.0	10.6	9.2	11.8	11.3	13.5	13.4
10	5.5	4.4	7.4	7.0	8.4	6.2	11.3	9.7	11.5	11.1	13.5	12.5
11	6.8	5.2	7.5	6.9	8.0	5.9	11.8	11.2	11.9	10.9	13.1	12.1
12	6.7	5.1	7.3	6.7	8.4	8.0	11.8	11.2	11.1	10.6	12.1	11.2
13	6.3	5.8	7.1	6.6	8.9	8.4	11.2	10.7	11.2	10.3	11.9	10.6
14	5.9	4.3	6.7	6.0	9.2	7.3	11.1	10.7	12.0	10.9	12.3	11.6
15	5.2	3.8	6.1	5.7	8.7	6.4	11.4	10.7	12.0	11.4	12.3	12.0
16	5.1	4.5	6.3	5.5	9.0	8.0	11.4	11.2	12.6	12.1	12.3	12.1
17	4.6	3.6	6.4	6.1	10.2	8.9	---	---	12.6	12.2	12.2	12.0
18	5.1	3.9	6.1	5.3	11.0	10.2	---	---	12.2	11.7	12.6	12.2
19	4.7	4.1	6.2	5.3	11.1	10.7	11.7	11.1	12.6	11.4	12.9	12.4
20	5.3	4.2	7.7	5.6	10.8	9.8	11.3	10.7	12.6	9.7	12.4	11.8
21	4.9	4.2	8.8	7.6	10.0	9.6	11.4	11.0	12.0	11.5	11.8	11.0
22	4.2	3.6	9.4	8.4	10.2	9.8	11.2	9.9	12.4	11.5	11.7	10.0
23	3.7	3.0	9.3	8.5	10.3	9.9	12.1	10.1	12.2	11.0	12.7	11.7
24	3.1	2.5	9.0	8.3	10.0	9.4	12.3	11.7	12.1	11.2	13.2	12.6
25	3.4	2.4	8.6	7.8	9.7	9.3	12.7	11.1	11.8	11.3	13.2	12.5
26	3.4	2.8	9.0	7.8	9.5	8.4	12.5	12.3	12.1	11.8	13.1	12.2
27	4.0	3.1	8.7	7.1	8.5	8.1	12.4	12.0	11.9	11.4	12.6	11.6
28	4.2	3.5	8.5	6.8	9.0	7.9	12.3	11.7	11.5	10.5	12.5	11.4
29	4.3	3.7	9.4	8.1	9.1	8.7	12.2	11.4	10.5	10.1	11.8	10.4
30	4.3	3.8	9.1	6.7	9.1	6.1	12.2	11.6	---	---	13.0	10.8
31	4.2	3.4	---	---	10.5	8.9	12.2	11.6	---	---	13.3	11.9
MONTH	6.8	2.4	9.4	3.7	11.1	5.7	12.7	9.0	12.6	9.7	14.5	10.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.1	11.6	8.7	7.9	8.1	6.9	8.3	6.5	7.8	5.3	4.5	3.1
2	13.7	11.8	8.3	7.8	7.1	5.8	6.5	4.6	6.5	4.4	4.0	2.8
3	14.0	11.9	9.2	8.0	6.0	5.1	4.6	4.4	7.6	2.2	4.2	3.3
4	13.0	9.9	9.8	8.4	6.1	5.0	5.4	4.4	9.5	3.4	5.2	4.2
5	13.1	11.0	11.3	8.9	6.0	5.1	7.9	5.0	10.9	5.6	5.8	4.8
6	12.7	10.8	12.2	9.1	6.4	4.2	6.9	5.7	7.8	4.8	5.2	3.3
7	13.5	9.1	12.9	8.8	6.9	5.0	6.1	5.4	5.8	5.6	7.4	3.9
8	14.4	13.5	10.2	8.5	11.2	6.9	6.8	5.0	---	---	5.8	3.5
9	14.4	13.8	9.8	8.7	10.2	4.6	8.5	6.3	---	---	6.0	3.7
10	13.8	12.5	9.5	9.0	7.7	4.8	9.3	6.6	---	---	6.0	4.4
11	12.5	11.9	9.4	8.9	12.4	5.7	8.8	6.2	6.8	5.9	7.7	4.1
12	11.9	11.2	9.4	8.4	10.2	5.8	11.1	5.3	6.1	5.0	6.4	4.4
13	11.2	9.5	8.8	7.8	6.9	3.8	8.4	4.7	6.3	4.7	7.2	4.6
14	10.6	8.6	8.9	7.9	9.4	3.7	7.3	3.6	5.6	1.4	6.1	4.6
15	8.8	8.6	8.4	7.7	6.3	5.2	6.5	4.6	---	---	6.3	5.6
16	9.2	8.6	8.9	8.4	7.1	5.6	6.5	4.7	---	---	7.0	6.3
17	9.3	9.1	9.1	8.2	7.0	6.3	6.0	5.3	---	---	7.6	6.8
18	9.2	9.1	8.7	8.1	7.2	6.2	6.5	4.5	---	---	7.5	6.4
19	9.1	8.7	8.4	7.6	6.9	6.0	6.8	2.9	---	---	7.8	4.8
20	8.9	8.5	8.4	7.8	8.9	5.3	7.3	4.6	---	---	8.2	7.2
21	9.2	8.5	8.7	7.7	8.4	4.9	9.0	4.3	---	---	7.5	6.9
22	9.1	8.7	8.9	7.7	7.8	6.0	10.6	4.4	---	---	8.4	7.1
23	8.8	8.7	9.7	7.2	8.6	7.1	10.2	4.6	---	---	8.2	7.2
24	9.7	8.6	11.8	6.9	8.1	6.8	7.0	4.4	---	---	7.9	7.4
25	10.2	9.7	11.2	7.3	7.5	6.4	9.4	3.9	---	---	8.1	7.5
26	9.9	8.9	10.8	6.4	8.8	6.7	9.2	4.7	---	---	8.5	6.2
27	9.2	8.7	10.3	5.9	11.9	5.9	8.3	5.4	---	---	6.5	5.1
28	9.1	8.6	10.1	5.3	13.8	6.4	13.6	5.5	7.8	4.8	6.9	5.0
29	9.0	8.6	8.7	5.4	9.4	5.5	13.6	8.8	6.6	4.4	7.3	6.0
30	9.1	8.6	5.4	1.1	9.4	4.7	14.4	8.8	8.4	4.3	6.3	5.8
31	---	---	7.3	4.0	---	---	13.5	9.3	5.9	3.6	---	---
MONTH	14.4	8.5	12.9	1.1	13.8	3.7	14.4	2.9	---	---	8.5	2.8
YEAR	14.5	1.1										

04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	22.0	16.5	14.5	4.5	3.5	4.0	2.5	4.0	1.5	11.5	8.0
2	23.5	21.5	18.0	15.0	4.0	3.0	4.0	3.0	5.0	2.5	8.5	3.5
3	24.0	21.5	15.0	12.0	4.5	3.5	5.0	2.5	4.5	1.5	3.5	2.0
4	22.5	20.5	12.0	9.0	5.0	3.5	4.5	2.5	1.0	0.0	2.0	1.0
5	20.5	18.5	11.0	8.5	6.0	4.5	3.0	1.5	1.0	0.0	1.5	0.5
6	19.0	17.0	10.5	8.0	9.0	6.0	3.0	1.5	1.0	0.5	2.0	0.5
7	17.0	14.0	8.0	5.5	8.5	7.0	3.5	1.0	1.5	0.5	4.5	1.5
8	15.0	13.0	6.0	4.0	7.5	7.0	3.5	1.5	2.0	0.5	3.5	1.0
9	17.5	15.0	7.0	6.0	8.5	7.0	6.0	2.5	2.5	1.0	3.5	1.0
10	17.0	14.5	8.5	6.5	11.5	8.5	4.0	2.0	3.0	1.0	5.0	1.0
11	14.5	13.0	9.0	7.0	11.0	7.5	2.5	1.0	3.5	2.0	7.0	2.0
12	14.5	12.0	10.5	8.5	7.5	6.5	3.0	2.0	5.5	3.0	7.5	5.5
13	16.0	13.5	10.0	9.0	7.0	5.5	3.5	2.0	5.5	2.5	6.5	5.5
14	17.0	15.5	12.0	9.0	7.5	5.0	2.5	0.5	5.0	1.5	5.5	3.5
15	17.5	15.5	14.5	12.0	9.5	6.5	0.5	0.5	3.5	2.0	4.0	3.5
16	19.0	17.0	13.0	12.0	8.0	7.0	0.5	0.5	3.0	1.5	5.5	4.0
17	19.5	18.0	13.5	11.5	7.0	3.5	---	---	4.0	1.0	5.5	5.0
18	19.5	17.0	14.5	12.5	3.5	2.5	---	---	3.5	1.5	5.0	4.5
19	19.0	17.5	14.5	10.0	3.5	2.0	4.5	4.0	2.0	0.0	6.5	3.5
20	19.0	16.5	10.0	7.0	5.0	3.5	5.0	3.5	2.0	0.0	8.5	5.5
21	19.5	17.5	7.0	4.5	5.0	4.5	4.5	3.5	4.0	1.0	11.0	7.5
22	19.0	18.5	4.5	2.5	4.5	2.5	7.5	4.0	3.5	1.5	10.5	6.5
23	19.0	18.5	4.0	3.0	4.0	3.0	5.5	2.0	3.5	1.5	6.5	4.5
24	18.5	17.5	5.5	3.5	6.0	4.0	3.5	1.5	4.0	2.5	6.5	3.5
25	18.0	17.0	6.0	4.5	5.5	4.0	3.0	0.0	6.0	2.5	7.5	4.5
26	18.5	17.0	6.0	4.5	8.0	5.5	2.5	0.0	4.5	2.5	9.5	5.0
27	17.5	16.5	8.0	5.0	9.0	7.0	2.0	0.5	5.0	3.0	10.5	6.5
28	17.5	16.0	7.0	5.5	9.5	4.0	2.0	0.5	7.5	4.0	10.5	7.0
29	18.0	16.0	7.0	5.0	5.0	3.0	1.5	0.5	8.5	5.5	8.0	6.5
30	18.5	16.0	7.5	4.5	8.5	5.0	1.0	0.5	---	---	8.0	5.5
31	18.5	16.5	---	---	5.0	4.0	1.5	0.0	---	---	10.0	5.5
MONTH	24.0	12.0	18.0	2.5	11.5	2.0	7.5	0.0	8.5	0.0	11.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.5	17.5	15.0	16.5	14.5	23.0	19.0	25.5	23.0	25.0	21.0
2	8.0	6.0	18.5	16.0	19.0	15.5	21.5	20.5	24.5	22.5	24.0	20.0
3	10.5	5.5	18.0	15.5	21.0	17.5	22.5	20.0	24.0	22.5	20.5	19.0
4	10.5	7.5	15.5	14.5	23.5	19.0	21.5	19.5	24.0	20.5	21.0	18.0
5	12.0	7.5	18.0	13.5	24.0	19.5	20.0	18.5	25.0	20.0	21.0	19.0
6	14.5	9.5	19.5	15.0	22.5	21.0	21.0	18.0	24.0	21.0	22.0	19.0
7	10.5	2.5	18.0	15.5	24.0	19.0	21.5	18.0	21.0	21.0	23.5	18.0
8	2.5	1.5	15.5	13.0	24.0	19.5	22.0	18.0	---	---	23.5	21.0
9	5.0	2.0	13.0	10.0	23.0	19.5	22.5	20.0	---	---	22.0	18.5
10	8.5	5.0	12.0	10.0	21.5	17.5	24.5	20.0	---	---	22.0	18.5
11	11.0	8.5	14.5	12.0	22.0	16.5	27.0	22.0	22.5	22.0	23.0	20.5
12	13.0	10.0	16.5	14.0	21.0	17.5	27.5	23.5	24.0	20.0	23.5	22.5
13	16.0	13.0	16.0	15.0	21.5	19.0	26.0	23.5	27.0	21.0	24.5	22.5
14	16.0	13.0	16.5	14.5	23.5	20.0	26.5	22.5	27.0	23.0	22.5	19.5
15	14.5	13.0	15.5	13.5	22.0	21.5	24.5	22.0	---	---	19.5	17.5
16	14.0	12.0	14.5	14.0	21.5	19.5	24.0	22.0	---	---	19.5	17.5
17	13.0	11.0	16.5	14.0	19.5	18.0	24.5	22.0	---	---	22.0	19.0
18	14.5	12.5	18.5	15.5	22.0	18.0	27.0	23.0	---	---	21.0	20.0
19	15.0	14.0	20.5	17.5	23.0	19.0	26.5	23.0	---	---	20.0	19.0
20	15.0	11.0	21.0	18.0	24.0	21.0	28.5	24.5	---	---	20.0	17.5
21	11.0	9.0	22.0	18.5	22.5	19.0	30.0	25.5	---	---	19.5	17.5
22	11.0	9.5	22.5	19.0	19.0	16.5	30.0	26.0	---	---	19.0	16.5
23	12.0	10.5	23.0	20.0	16.5	14.5	30.0	26.0	---	---	17.0	15.5
24	11.5	10.5	24.0	20.5	15.5	14.5	28.5	24.0	---	---	18.0	16.0
25	11.0	9.5	24.0	20.5	18.5	14.5	26.5	23.0	---	---	19.0	17.0
26	12.0	9.5	23.5	19.0	20.5	16.5	25.0	22.0	---	---	19.0	18.5
27	13.5	11.0	23.5	19.0	24.0	18.0	23.5	21.5	---	---	19.5	18.0
28	14.5	12.0	23.0	19.0	23.5	20.5	24.5	20.5	24.0	21.0	18.0	17.0
29	14.5	12.5	23.0	19.0	23.0	19.5	24.5	21.0	25.0	20.0	17.5	17.0
30	16.5	13.0	20.0	19.0	21.5	19.5	25.5	21.5	24.5	21.0	17.0	15.0
31	---	---	19.0	15.5	---	---	26.5	22.5	25.0	21.0	---	---
MONTH	16.5	1.5	24.0	10.0	24.0	14.5	30.0	18.0	---	---	25.0	15.0
YEAR	30.0	0.0										

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04189000 BLANCHARD RIVER NEAR FINDLAY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
05...	1215	18.5	13	52	1.8
NOV.					
02...	1310	18.0	17	32	1.5
16...	1310	13.0	15	18	.73
DEC.					
02...	1210	4.0	12	4	.13
JAN.					
11...	1510	2.5	340	90	83
FEB.					
14...	1440	4.5	64	13	2.2
MAR.					
03...	1105	--	1510	318	1300
07...	0900	2.0	221	38	23
APR.					
04...	1400	9.0	115	18	5.6
09...	1420	--	1230	259	860
23...	0825	10.0	5070	357	4890
MAY					
16...	1315	15.0	1340	581	2100
SEP.					
21...	1015	18.0	226	108	66

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR.									
03...	1105	69	84	91	96	97	98	99	100
APR.									
23...	0825	84	91	97	98	98	99	100	--
MAY									
16...	1315	92	96	97	98	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
21...	1015	1	0	0	1	2	2	3	4	7	19	100

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO

LOCATION.--Lat 41°14'15", long 84°23'57", in NE 1/4 sec.9, T.3 N., R.4 E., Defiance County, at gaging station on right bank, 125 ft downstream from dam of Toledo Edison Co., 0.2 mile upstream from Jackson ditch, and 3 miles south of Defiance. Continuous water-quality recorder located at powerplant 125 ft upstream from gaging station.

DRAINAGE AREA.--2,318 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1972.
Water temperatures: January 1966 to September 1972.
Sediment records: Water years 1952, 1963, 1970-72 (partial-record station).

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,200 micromhos Dec. 7; minimum, 213 micromhos July 16.
pH: Maximum, 9.2 Oct. 21; minimum, 6.4 Apr. 13.
Dissolved oxygen: Maximum, 15.0 mg/l on several days during October, June and July; minimum, 0.6 mg/l Oct. 7.
Water temperatures: Maximum, 32.0°C Aug. 27; minimum, freezing point Jan. 5, 7, 28, Mar. 2, 3.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
06...	0855	21	174	0	120	50	.6	3.6
13...	1510	--	--	--	--	--	--	--
28...	1000	30	178	4	190	85	1.1	4.1
NOV.								
03...	1430	62	188	0	190	86	.8	5.0
27...	1705	95	203	6	180	79	.7	3.7
DEC.								
07...	1640	378	190	0	230	100	1.0	16
18...	1655	2740	124	0	68	26	.2	12
JAN.								
05...	0900	1400	164	0	78	27	.2	4.7
21...	1145	1010	218	0	120	43	.3	11
FEB.								
19...	1345	--	200	0	180	81	.6	12
26...	1515	--	172	0	120	37	.4	4.3
MAR.								
06...	1630	1430	126	0	120	26	.4	14
31...	1315	1210	206	8	140	47	.5	8.4
APR.								
04...	1445	847	206	0	120	36	.3	8.8
22...	1530	24500	100	0	39	8.1	.2	5.0
MAY								
10...	1345	--	230	0	140	36	.4	4.7
13...	1035	3800	116	0	63	17	.2	8.8
JUNE								
03...	1300	1860	169	0	82	28	.3	15
06...	1815	--	--	--	--	--	--	--
20...	1530	497	194	0	120	46	.4	11
JULY								
08...	1245	641	183	0	110	34	.9	10
17...	1930	5180	120	0	49	15	.6	9.8
AUG.								
22...	1250	903	212	0	160	65	1.2	4.4
31...	0855	151	172	0	92	31	.9	3.0
SEP.								
09...	1230	82	190	0	100	37	.9	2.8
30...	1505	12100	138	0	46	13	.4	4.1

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
07...	1420	17.5	22	52	3.1
28...	0905	16.0	30	44	3.6
DEC.					
16...	1605	6.5	7300	273	5380
JAN.					
25...	1040	.0	2460	26	173
MAR.					
23...	1020	7.0	1300	56	197
APR.					
09...	0840	4.0	11600	794	24900
23...	1140	--	26000	710	49800
MAY					
03...	0950	17.5	1050	66	187
SEP.					
20...	1600	20.5	5700	203	3120

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1966-68, 1969-72): Maximum, 1,260 micromhos Jan. 29, 1970; minimum, 140 micromhos Aug. 30, 1970.
pH (1969-72): Maximum, 9.6 Aug. 10, 1971; minimum, 6.4 Apr. 13, 1972.
Dissolved oxygen (1970-72): Maximum, 15.0 mg/l on many days during 1971 and 1972; minimum, 0.6 mg/l Oct. 7, 1971.
Water temperatures (1966-68, 1969-72): Maximum, 32.0°C Aug. 27, 1972; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since January 1966. Minimum recorded dissolved oxygen concentration of 0.2 mg/l occurred July 1, 1966. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
06...	16	470	260	120	699	--	--	--
13...	--	--	--	--	--	6	<.5	10
28...	18	626	340	190	960	--	--	--
NOV.								
03...	22	618	340	180	982	--	--	--
27...	16	606	340	160	884	--	--	--
DEC.								
07...	69	740	380	220	1120	--	--	--
18...	55	330	220	120	484	--	--	--
JAN.								
05...	21	398	260	120	553	--	--	--
21...	49	514	350	170	739	--	--	--
FEB.								
19...	53	632	380	220	969	--	--	--
26...	19	468	300	160	725	--	--	--
MAR.								
06...	61	350	240	140	515	--	--	--
31...	37	560	370	190	793	--	--	--
APR.								
04...	39	496	330	160	703	--	--	--
22...	22	216	140	58	295	--	--	--
MAY								
10...	21	498	360	170	756	--	--	--
13...	39	278	200	100	426	--	--	--
JUNE								
03...	66	444	280	140	618	--	--	--
06...	--	--	--	--	--	--	<.5	6.0
20...	48	500	320	160	756	--	--	--
JULY								
08...	46	422	300	150	659	--	--	--
17...	43	244	180	82	394	--	--	--
AUG.								
22...	19	534	330	160	848	--	--	--
31...	13	338	240	99	559	--	--	--
SEP.								
09...	12	388	260	100	617	--	--	--
30...	18	246	180	67	374	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC.								
16...	1605	84	93	96	99	100	--	--
APR.								
09...	0840	71	84	90	96	99	100	--
23...	1140	73	83	87	92	96	98	100

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	794	711	996	990	962	711	656	491	741	729	764	744
2	753	722	996	992	966	951	510	486	759	741	765	560
3	755	704	1000	983	995	966	524	509	773	759	560	480
4	729	693	989	984	1020	992	554	524	830	771	480	458
5	702	695	984	973	1080	1010	594	552	797	783	486	467
6	708	659	973	963	1120	1050	614	594	818	797	513	486
7	---	---	964	958	1200	1070	633	614	837	815	540	513
8	731	725	958	943	1190	981	671	633	873	834	576	540
9	729	728	948	943	981	600	707	668	896	869	605	576
10	734	729	946	933	605	570	749	702	914	888	626	605
11	737	732	937	930	599	581	750	672	920	909	639	626
12	738	735	933	924	668	599	672	576	930	911	656	635
13	743	737	930	924	678	668	578	554	939	921	683	530
14	749	741	925	916	675	668	578	551	974	939	530	392
15	756	743	916	909	676	581	609	578	975	942	495	449
16	782	741	913	907	581	486	623	609	1010	948	464	447
17	798	758	913	901	486	470	639	618	1050	956	486	446
18	815	794	904	871	494	485	---	---	1060	993	525	485
19	834	810	886	871	504	494	---	---	1050	989	549	516
20	842	813	888	879	534	498	---	---	989	972	587	546
21	878	840	886	883	599	531	795	761	972	887	825	575
22	926	863	898	886	636	599	849	795	887	840	638	600
23	941	896	886	880	639	632	836	777	840	801	657	638
24	947	935	882	871	656	639	777	707	801	755	681	657
25	950	939	879	871	680	647	717	693	755	734	701	678
26	975	950	880	876	713	680	746	672	734	726	726	701
27	998	969	877	874	747	713	687	672	734	728	743	725
28	993	975	877	859	773	747	686	661	738	734	753	740
29	981	977	879	852	795	770	701	683	746	737	767	752
30	995	977	852	759	807	789	719	701	---	---	782	755
31	993	989	---	---	809	656	732	719	---	---	791	777
MONTH	998	659	1000	759	1200	470	849	486	1060	726	825	392

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	807	776	626	596	807	638	662	491	576	570	560	519
2	729	729	663	627	728	638	533	248	587	572	587	558
3	726	705	678	654	653	612	---	---	594	576	593	578
4	719	708	689	657	657	630	---	---	609	578	600	575
5	714	705	704	678	687	656	476	469	632	600	606	506
6	734	702	710	674	689	660	587	464	656	629	615	444
7	737	710	717	684	680	624	632	560	680	651	609	576
8	710	401	722	710	659	618	687	612	687	657	630	576
9	408	368	728	701	659	645	745	703	750	653	636	629
10	461	406	764	702	680	650	756	708	755	719	647	636
11	492	461	705	462	710	660	759	712	803	755	657	645
12	527	492	459	411	729	701	784	633	809	776	659	645
13	566	450	435	413	747	719	795	766	824	737	683	651
14	474	356	459	437	749	723	787	610	845	720	651	216
15	369	345	561	459	731	662	673	274	854	818	311	216
16	434	369	605	566	683	639	370	213	852	579	365	290
17	483	440	609	521	642	618	481	237	651	411	290	249
18	473	420	522	479	704	611	511	413	842	482	386	216
19	452	422	510	488	749	635	557	416	---	---	387	338
20	501	449	534	512	753	732	586	424	---	---	453	335
21	452	285	560	531	759	735	627	445	---	---	450	335
22	293	276	584	456	761	732	646	440	885	824	411	335
23	299	285	609	584	734	612	627	486	887	822	428	410
24	306	284	657	606	776	582	671	482	830	729	468	428
25	345	306	657	648	792	770	503	483	737	618	492	467
26	416	344	657	648	788	761	509	494	642	573	548	482
27	470	416	665	651	774	702	509	479	600	566	525	402
28	521	470	666	624	707	677	536	498	581	564	429	399
29	572	521	675	579	693	599	554	533	578	566	401	377
30	606	572	656	446	674	597	566	549	573	563	402	368
31	---	---	795	467	---	---	579	564	578	533	---	---
MONTH	807	276	795	411	807	582	871	213	837	411	683	216
YEAR	1200	213										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.7	8.2	7.9	8.4	6.9	7.2	6.9	7.4	7.4	7.5	7.4
2	8.7	8.1	8.1	7.9	8.2	8.1	7.0	6.9	7.4	7.3	7.7	7.4
3	8.8	7.9	8.2	8.0	8.2	8.1	7.1	7.0	7.4	7.3	7.6	7.5
4	8.4	7.3	8.2	8.1	8.2	8.1	7.2	7.0	7.5	7.4	7.7	7.5
5	7.3	7.1	8.2	8.1	8.1	7.9	7.5	7.1	7.5	7.3	7.8	7.7
6	7.3	7.1	8.1	8.1	8.0	7.7	7.6	7.5	7.4	7.3	7.8	7.7
7	8.0	7.3	8.3	8.1	8.0	7.5	7.6	7.5	7.4	7.3	7.8	7.7
8	8.2	7.5	8.4	8.2	7.8	7.1	7.6	7.5	7.4	7.3	8.0	7.8
9	7.6	7.5	8.4	8.3	7.1	6.8	7.5	7.4	7.3	7.3	7.9	7.9
10	7.7	7.5	8.3	8.2	7.0	6.8	7.5	7.4	7.3	7.3	7.9	7.9
11	7.7	7.6	8.5	8.2	7.0	6.9	7.4	7.3	7.8	7.3	7.9	7.8
12	7.8	7.6	8.4	8.3	7.0	6.9	7.3	7.3	7.8	7.7	7.8	7.7
13	7.8	7.6	8.4	8.3	7.0	7.0	7.4	7.3	7.7	7.7	7.9	7.7
14	8.0	7.6	8.4	8.2	7.1	7.0	7.5	7.4	7.7	7.6	7.7	7.6
15	8.8	7.9	8.5	8.2	7.2	7.0	7.6	7.5	7.7	7.6	7.6	7.5
16	9.1	8.5	8.5	8.3	7.1	6.8	7.6	7.5	7.8	7.7	7.5	7.5
17	8.8	8.4	8.6	8.2	7.1	6.8	7.6	7.4	7.7	7.6	8.0	7.5
18	8.8	8.5	8.8	8.5	7.1	7.0	---	---	7.7	7.6	8.0	8.0
19	9.0	8.5	8.7	8.6	7.1	7.0	---	---	7.8	7.7	8.2	8.0
20	9.1	8.8	8.7	8.5	7.1	7.0	---	---	7.8	7.8	8.4	8.1
21	9.2	8.9	8.7	8.6	7.1	7.0	7.3	7.2	7.8	7.8	8.1	7.3
22	9.1	8.7	8.8	8.6	7.2	7.1	7.4	7.1	7.8	7.7	7.6	7.3
23	8.9	8.3	8.8	8.7	7.2	7.1	7.3	7.2	7.7	7.7	7.6	7.6
24	8.4	8.0	8.9	8.7	7.3	7.2	7.4	7.2	7.7	7.6	7.6	7.6
25	8.6	8.2	8.9	8.8	7.2	7.2	7.5	7.4	7.6	7.6	7.6	7.6
26	8.3	8.1	8.9	8.8	7.2	7.2	7.5	7.5	7.6	7.6	7.6	7.5
27	8.2	8.0	8.9	8.8	7.3	7.2	7.5	7.5	7.6	7.6	7.6	7.6
28	8.1	7.8	8.9	8.7	7.4	7.2	7.5	7.5	7.6	7.6	7.6	7.6
29	8.0	7.7	8.7	8.3	7.4	7.3	7.5	7.4	7.6	7.5	7.7	7.6
30	8.3	7.7	8.3	7.4	7.5	7.3	7.5	7.5	---	---	7.8	7.7
31	8.3	8.1	---	---	7.4	7.2	7.5	7.4	---	---	7.7	7.7
MONTH	9.2	7.1	8.9	7.4	8.4	6.8	7.6	6.9	7.8	7.3	8.4	7.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.7	7.5	7.4	8.0	7.4	8.5	7.8	8.1	7.6	8.9	8.5
2	7.8	7.7	7.6	7.5	7.5	7.4	7.8	7.1	7.9	7.7	8.6	7.8
3	7.7	7.7	7.8	7.6	7.5	7.4	---	---	8.1	7.5	7.8	7.5
4	7.8	7.7	7.8	7.7	7.5	7.4	---	---	7.6	7.4	7.8	7.6
5	7.8	7.7	7.9	7.6	7.6	7.5	7.1	7.1	7.9	7.5	8.1	7.5
6	7.8	7.7	7.8	7.7	8.1	7.3	7.3	7.1	7.9	7.8	8.2	7.6
7	7.9	7.8	7.7	7.7	7.7	7.4	7.6	7.3	7.8	7.7	8.1	7.7
8	7.8	7.2	7.8	7.7	7.9	7.4	7.6	7.4	7.8	7.8	8.0	7.6
9	7.2	7.2	7.9	7.7	8.0	7.5	7.9	7.4	8.3	7.8	7.8	7.6
10	7.3	7.2	8.4	7.7	7.6	7.5	8.0	7.4	7.9	7.8	7.7	7.6
11	7.3	7.2	7.7	7.4	7.8	7.6	8.2	7.8	8.0	7.8	7.9	7.6
12	7.5	7.2	7.4	7.3	7.7	7.6	8.6	7.9	8.3	8.0	7.8	7.6
13	7.7	6.4	7.3	7.3	8.0	7.6	8.5	8.3	8.5	8.0	7.8	7.6
14	7.3	7.2	7.5	7.3	8.1	7.8	8.3	8.0	8.6	8.4	7.7	7.2
15	7.2	6.7	7.7	7.4	8.3	7.9	8.0	7.5	8.4	8.2	7.2	7.1
16	7.4	7.2	7.6	7.4	8.2	7.5	7.5	7.1	8.5	8.2	7.1	7.0
17	7.3	7.2	7.4	7.3	8.1	7.6	7.3	7.0	8.3	8.1	7.1	7.0
18	7.3	7.2	7.4	7.3	8.1	7.9	7.2	7.1	8.2	8.1	7.2	7.1
19	7.3	7.2	7.4	7.3	8.5	7.9	7.2	7.1	---	---	7.2	7.1
20	7.3	7.2	7.5	7.4	8.5	8.2	7.3	7.1	---	---	7.2	7.0
21	7.2	7.2	7.8	7.3	8.2	8.0	7.3	7.1	---	---	7.2	7.1
22	7.3	7.2	7.7	7.3	8.0	7.6	7.3	7.1	8.3	8.2	7.3	7.2
23	7.3	7.2	7.8	7.6	7.7	7.6	7.3	7.2	8.2	7.7	7.3	7.2
24	7.3	7.2	8.0	7.5	7.9	7.6	7.4	7.2	7.8	7.5	7.3	7.2
25	7.3	7.3	7.9	7.2	7.9	7.8	7.6	7.2	7.5	7.3	7.3	7.3
26	7.3	7.3	7.9	7.5	7.8	7.4	7.3	7.2	7.6	7.3	7.4	7.2
27	7.4	7.3	7.9	7.6	7.5	7.3	7.3	7.2	7.5	7.3	7.5	7.2
28	7.4	7.4	8.6	7.9	8.0	7.3	7.3	7.2	8.1	7.4	7.2	7.2
29	7.4	7.4	8.5	8.1	8.9	7.6	7.3	7.2	7.5	7.2	7.3	7.2
30	7.5	7.4	8.1	7.9	8.7	6.4	7.3	7.2	7.4	7.2	7.3	7.2
31	---	---	7.9	7.7	---	---	7.9	7.3	8.8	7.3	---	---
MONTH	7.9	6.4	8.6	7.2	8.9	7.3	8.6	7.0	8.8	7.2	8.9	7.0
YEAR	9.2	6.4										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	4.5	9.4	7.2	13.7	10.5	10.7	9.5	11.5	11.2	8.1	7.7
2	10.7	6.9	8.5	7.1	13.1	11.2	10.9	10.4	11.2	11.0	8.3	7.5
3	10.8	6.3	8.6	7.2	12.7	11.4	10.8	10.6	11.1	10.9	8.5	8.0
4	8.2	4.4	9.5	7.2	13.2	11.3	10.9	10.6	11.2	11.0	9.3	8.5
5	4.6	1.3	10.3	8.3	14.1	11.0	11.0	10.7	11.0	10.8	10.0	9.4
6	1.5	0.9	9.8	9.3	13.7	10.3	10.9	10.7	10.8	10.4	10.1	9.4
7	1.2	0.6	10.7	9.5	13.0	10.7	11.3	9.2	10.4	10.0	10.5	9.4
8	6.2	1.2	11.5	9.8	14.0	10.0	9.3	8.7	10.1	9.6	10.7	10.1
9	7.2	5.3	11.0	10.5	10.0	8.4	9.1	8.8	9.8	9.5	10.7	9.9
10	7.6	5.4	11.1	10.1	10.0	8.8	10.4	8.8	9.9	9.4	10.4	9.6
11	8.0	6.5	11.9	10.4	10.1	8.7	10.2	9.5	9.8	8.3	10.0	9.4
12	8.5	6.8	11.3	10.6	8.8	8.2	9.6	9.2	8.6	7.6	9.8	9.3
13	8.2	7.0	11.2	10.6	10.4	8.5	9.8	9.1	8.0	7.5	9.9	9.0
14	9.2	6.9	11.5	10.5	9.6	9.4	9.9	9.2	7.9	6.6	9.7	9.1
15	14.1	8.3	12.7	10.7	11.5	9.5	10.1	9.0	8.3	7.0	9.3	8.7
16	15.0	11.6	13.1	10.8	11.3	9.5	9.5	8.9	8.5	6.7	9.4	8.2
17	13.7	9.3	13.9	10.4	10.8	9.4	10.6	8.9	8.2	6.2	10.3	8.0
18	13.9	9.4	13.8	11.7	10.9	9.0	---	---	6.8	5.0	8.7	7.8
19	15.0	10.7	12.8	11.2	11.7	9.0	---	---	6.4	5.2	8.0	7.7
20	15.0	12.4	11.2	10.3	11.7	11.5	---	---	7.4	6.3	8.3	7.8
21	15.0	12.8	10.9	9.9	11.5	11.4	10.9	10.1	8.0	7.1	9.0	8.1
22	14.4	12.0	12.1	10.2	11.9	11.2	10.1	9.2	8.1	7.7	8.8	8.4
23	12.9	7.3	11.9	11.0	11.5	11.2	9.8	9.2	7.9	7.4	8.6	8.5
24	8.6	5.3	13.3	11.3	11.8	11.4	10.4	9.8	7.8	7.5	8.5	8.4
25	10.8	8.3	13.6	12.2	11.7	11.3	11.3	10.4	7.8	7.4	8.5	8.4
26	8.7	6.3	12.9	12.2	11.3	11.0	11.4	11.1	8.0	7.3	8.9	8.5
27	8.2	6.3	13.3	12.5	11.0	10.6	11.4	10.9	8.0	7.6	8.7	8.5
28	8.5	5.8	13.4	12.6	11.3	10.9	11.5	11.4	8.0	7.4	8.8	8.6
29	7.8	5.3	13.4	12.3	11.1	10.9	11.7	11.3	8.2	7.5	8.7	8.1
30	10.9	4.7	12.8	12.1	11.3	10.7	11.8	11.6	---	---	8.5	7.9
31	10.4	9.1	---	---	11.1	10.2	11.8	11.5	---	---	8.0	7.8
MONTH	15.0	0.6	13.9	7.1	14.1	8.2	11.8	8.7	11.5	5.0	10.7	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.1	7.8	6.6	5.9	5.7	4.7	12.9	7.3	10.3	7.1	14.4	10.2
2	8.6	7.7	6.2	5.6	6.1	5.4	6.8	3.6	9.1	7.2	11.0	4.3
3	8.4	7.4	6.6	5.0	6.3	5.7	---	---	11.6	6.1	4.3	2.3
4	8.5	7.3	6.5	4.8	6.5	6.0	---	---	5.9	4.9	3.4	2.2
5	13.2	7.1	6.3	5.0	6.6	5.9	5.1	4.5	8.2	4.9	5.4	1.9
6	9.8	7.9	5.9	4.8	9.1	3.6	5.1	4.1	7.7	6.8	8.4	2.2
7	8.4	7.7	5.6	4.3	8.0	4.9	7.1	4.5	7.0	6.5	7.3	4.1
8	8.6	6.3	5.5	4.4	9.0	5.2	7.3	5.5	6.5	5.8	5.8	3.4
9	7.1	5.2	6.7	4.7	9.6	6.2	9.6	5.5	10.8	5.8	5.8	3.4
10	5.6	4.7	8.7	6.3	6.6	5.3	10.1	5.3	6.5	5.1	5.7	4.4
11	5.7	4.4	6.4	5.8	7.2	5.7	11.9	8.8	7.3	5.0	6.5	4.7
12	10.5	4.7	5.9	5.5	6.4	5.2	15.0	9.4	10.6	6.5	6.4	4.3
13	10.4	8.4	6.2	5.4	7.4	5.5	14.1	11.1	14.9	6.6	6.0	4.3
14	8.3	6.2	6.2	5.6	8.8	6.0	11.1	7.4	14.2	11.0	6.4	5.1
15	7.6	6.2	6.5	5.9	11.7	7.3	7.4	4.8	12.4	8.9	5.1	2.2
16	8.4	7.0	6.0	4.8	10.2	5.3	4.9	3.8	11.6	7.6	4.1	2.9
17	7.9	7.3	5.2	4.6	9.1	6.2	5.5	3.4	9.2	6.9	2.9	2.5
18	7.9	7.2	5.4	4.8	8.6	7.0	5.5	4.7	8.3	6.3	4.0	2.2
19	7.8	7.4	5.4	4.9	13.6	6.7	5.4	4.5	---	---	5.2	2.2
20	7.5	6.9	5.5	5.0	12.1	8.6	5.5	3.9	---	---	5.6	3.9
21	7.7	6.7	6.6	4.2	8.6	6.6	5.3	4.2	---	---	5.3	3.3
22	9.1	7.3	5.7	4.1	6.8	5.0	5.8	4.3	7.9	5.3	6.0	3.5
23	9.4	5.4	6.1	5.0	5.9	4.7	5.6	4.8	6.5	4.1	6.1	5.7
24	5.7	5.1	9.2	5.2	7.7	5.3	6.3	3.7	5.5	3.3	6.2	5.7
25	6.4	5.1	8.6	3.2	8.8	6.6	6.9	4.7	3.7	2.6	6.5	6.1
26	6.7	5.8	7.1	5.3	7.6	4.8	5.3	3.8	5.9	2.0	7.0	6.0
27	6.2	5.7	8.1	4.5	6.4	4.5	4.5	3.7	3.3	1.5	7.2	6.0
28	6.2	5.9	14.7	7.5	10.7	4.8	4.8	3.5	9.6	2.1	6.2	6.1
29	6.3	5.8	13.8	7.5	15.0	8.0	4.9	4.2	5.3	2.1	6.6	6.2
30	6.4	5.8	7.7	5.3	14.7	11.0	4.9	4.0	3.7	1.5	7.7	6.6
31	---	---	5.3	3.4	---	---	8.8	4.4	13.9	2.6	---	---
MONTH	13.2	4.4	14.7	3.2	15.0	3.6	15.0	3.4	14.9	1.5	14.4	1.9
YEAR	15.0	0.6										

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	19.5	18.0	16.5	4.0	3.5	4.0	3.0	1.0	0.5	3.0	2.5
2	23.0	22.0	17.5	16.0	4.5	4.0	4.0	3.0	1.0	1.0	3.0	0.0
3	24.5	21.5	16.0	14.0	5.0	4.5	3.0	2.5	1.0	1.0	3.5	0.0
4	23.5	22.0	14.0	12.5	5.5	4.5	2.5	1.0	1.0	0.5	3.0	1.5
5	22.5	20.5	13.0	12.0	5.5	5.0	2.0	0.0	1.0	0.5	1.5	0.5
6	23.5	20.5	12.5	9.5	5.5	5.5	1.5	0.5	1.5	1.0	1.0	0.5
7	---	---	10.0	8.0	5.5	5.5	0.5	0.0	1.0	1.0	2.0	1.0
8	---	---	8.5	7.5	5.5	3.0	1.5	0.5	1.0	1.0	1.5	0.5
9	18.0	16.5	8.0	7.0	8.5	4.5	1.5	1.0	1.0	1.0	1.0	0.5
10	17.0	15.5	7.0	6.0	11.5	8.0	2.0	1.5	1.0	1.0	1.5	1.0
11	15.5	14.0	7.0	6.5	11.5	10.0	1.5	0.5	1.5	1.0	2.5	1.5
12	15.5	13.5	6.5	6.5	10.5	9.0	3.0	1.5	1.5	1.5	3.5	2.5
13	17.5	14.0	6.5	6.5	9.0	7.0	3.5	2.0	1.5	1.0	5.0	3.0
14	17.5	15.0	8.0	6.0	7.5	6.5	2.5	1.5	1.5	1.0	4.5	4.0
15	19.5	15.5	9.5	7.5	7.0	6.5	1.5	0.5	2.0	1.5	4.5	4.0
16	22.5	16.5	9.0	8.0	9.5	7.0	1.0	0.5	2.5	1.5	5.5	4.5
17	18.5	16.0	10.0	8.0	9.5	5.5	1.5	0.5	3.0	2.0	5.5	4.5
18	17.5	16.5	11.0	9.5	5.5	3.5	---	---	2.5	1.0	5.0	4.5
19	20.5	16.5	12.0	9.5	3.5	1.5	---	---	1.0	1.0	6.0	4.0
20	21.0	17.5	10.0	8.0	1.5	1.5	---	---	1.0	1.0	6.0	5.5
21	20.5	18.5	8.0	6.0	2.0	1.0	1.0	1.0	1.5	1.0	8.5	6.0
22	20.0	19.0	6.0	4.5	1.5	0.5	1.0	1.0	2.0	1.0	8.5	8.0
23	19.5	18.5	5.5	4.0	1.0	0.5	1.0	0.5	2.0	1.5	8.0	7.0
24	19.0	18.0	4.0	3.0	2.0	1.0	0.5	0.5	1.5	1.5	8.0	6.5
25	19.5	18.0	3.0	2.0	2.0	1.5	0.5	0.5	1.5	1.5	7.5	6.5
26	19.0	18.0	---	---	3.5	2.0	1.0	0.5	2.0	1.5	8.0	6.5
27	19.0	18.0	---	---	4.5	3.0	1.0	0.5	1.5	1.5	8.0	7.0
28	18.5	17.5	---	---	4.5	2.5	0.5	0.0	2.0	1.5	8.0	7.0
29	18.0	17.0	---	---	3.0	2.0	0.5	0.5	2.5	2.0	7.5	6.5
30	20.5	16.5	---	---	3.5	2.5	0.5	0.5	---	---	7.0	6.0
31	19.5	18.0	---	---	3.5	3.0	0.5	0.5	---	---	9.0	6.5
MONTH	25.0	13.5	18.0	2.0	11.5	0.5	4.0	0.0	3.0	0.5	9.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	19.0	17.0	20.0	16.0	25.0	21.0	27.0	25.5	28.5	26.5
2	7.5	7.0	19.0	18.0	18.0	15.5	23.0	21.5	25.5	24.5	27.5	24.5
3	8.0	6.5	19.5	18.0	19.0	17.0	---	---	26.5	24.5	24.5	23.5
4	9.0	7.0	19.5	18.0	21.0	18.5	---	---	24.5	23.5	25.0	23.0
5	10.0	7.5	23.0	17.5	21.5	20.5	22.0	21.5	25.5	23.0	25.5	22.5
6	11.5	9.0	20.5	19.0	24.0	21.0	22.0	21.0	24.5	23.0	24.5	22.5
7	10.5	7.5	20.0	19.0	23.0	22.5	23.0	21.0	23.0	22.0	23.5	22.5
8	7.5	4.5	19.0	16.5	25.0	22.5	23.0	21.0	22.0	21.5	23.0	22.5
9	7.0	3.5	16.5	15.0	26.0	23.0	23.5	21.5	22.0	19.5	22.5	22.0
10	11.0	7.0	15.5	15.0	23.0	21.5	26.5	22.0	21.0	19.0	22.0	21.0
11	14.0	11.0	17.0	14.0	23.5	21.0	27.0	24.5	21.5	19.5	23.0	21.0
12	11.0	9.0	14.5	13.0	22.0	21.0	28.0	25.5	23.0	20.0	22.0	20.0
13	15.0	10.0	16.0	13.5	24.0	21.5	28.0	26.5	25.0	21.5	23.5	22.0
14	15.5	14.0	15.5	14.5	24.5	22.5	27.0	26.0	26.0	23.5	23.0	20.5
15	15.5	14.5	17.0	15.0	25.5	23.5	26.5	25.0	25.0	23.5	20.5	19.5
16	16.0	15.0	18.0	16.5	24.5	22.5	25.5	24.0	25.0	22.5	19.5	19.0
17	15.5	14.5	19.0	16.0	23.0	22.0	24.5	23.0	26.5	22.0	---	---
18	15.5	14.0	20.0	17.0	23.0	22.0	26.5	24.0	27.0	25.5	---	---
19	16.5	15.0	19.5	18.0	27.0	22.5	27.0	24.0	---	---	20.0	19.5
20	16.0	14.0	21.5	19.5	26.0	25.0	29.0	25.0	---	---	19.5	19.0
21	14.0	10.5	24.0	21.5	25.0	23.0	29.0	26.0	---	---	19.5	19.0
22	10.5	10.0	24.0	21.5	22.5	21.0	30.5	27.0	27.5	26.5	19.0	17.5
23	11.5	10.0	24.0	23.0	21.0	18.5	30.0	28.0	27.5	26.0	17.5	17.0
24	12.0	11.5	25.0	22.0	18.5	17.5	30.0	28.0	27.0	26.0	18.0	17.0
25	12.5	11.0	23.5	21.5	20.5	17.0	29.0	27.0	26.0	25.5	18.5	17.0
26	14.0	11.5	23.5	21.5	19.0	17.5	27.0	25.5	27.5	25.5	19.0	17.5
27	14.5	12.5	23.5	22.0	17.5	17.0	25.5	24.0	32.0	26.5	19.0	18.0
28	16.5	13.5	26.0	23.0	20.0	17.0	24.0	23.5	28.0	24.5	18.0	17.0
29	16.0	15.0	25.5	24.0	26.5	19.0	24.0	23.5	25.5	24.5	17.0	16.5
30	19.0	15.5	24.0	22.5	25.0	23.0	24.0	23.5	25.0	24.0	16.5	14.5
31	---	---	22.5	20.0	---	---	29.0	23.5	28.5	23.5	---	---
MONTH	19.0	3.5	26.0	13.0	27.0	15.5	30.5	21.0	32.0	19.0	28.5	14.5
YEAR	32.0	0.0										

04193500 MAUMEE RIVER AT WATERVILLE, OHIO

LOCATION.--Lat 41°30'00", long 83°42'46", Lucas County, at gaging station on downstream side of second pier from left end of bridge on State Highway 64 at Waterville, 3 miles downstream from Tontogany Creek, and 21.1 miles upstream from mouth. Continuous water-quality recorder in water treatment plant 1,500 ft upstream from gaging station.

DRAINAGE AREA.--6,330 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1950 to February 1952, May 1963 to September 1972.
Water temperatures: March 1950 to September 1972.
Sediment records: April 1950 to September 1972.

EXTREMES.--1971-72:
Sediment concentrations: Maximum daily, 1,180 mg/l Apr. 16; minimum daily, 3 mg/l Nov. 6.
Sediment discharges: Maximum daily, 104,000 tons Apr. 23; minimum daily, 2.8 tons Nov. 5.

Period of record:
Specific conductance (1950-52, 1963-65, 1967-68): Maximum, 1,150 micromhos Dec. 19, 1964; minimum, 213 micromhos Jan. 30, 1952.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT.									
05...	1030	3360	200	0	140	64	.6	3.0	13
14...	1330	--	--	--	--	--	--	--	--
20...	1630	405	184	0	120	51	.6	1.9	8.4
NOV.									
02...	1130	600	200	0	100	47	.7	2.0	8.7
24...	0945	290	236	0	120	58	.7	1.9	8.5
DEC.									
08...	1600	2460	230	0	150	60	.8	2.6	12
15...	1620	9370	156	0	81	36	.2	11	50
JAN.									
12...	1100	9190	174	6	98	36	.5	7.3	32
26...	1600	6000	200	0	100	46	.5	8.7	39
FEB.									
14...	1640	640	210	0	110	66	.5	6.5	29
23...	1600	1200	247	0	140	59	.8	7.7	34
MAR.									
01...	1645	1170	212	0	140	77	.6	7.7	34
15...	1630	24600	132	0	61	23	.3	10	46
APR.									
05...	1800	5120	198	0	110	34	.3	8.4	37
24...	1110	44900	116	0	44	12	.2	6.7	30
MAY									
10...	1830	5500	220	0	99	27	.3	5.2	23
22...	1240	3480	175	0	77	24	.2	7.5	33
JUNE									
08...	1400	--	--	--	--	--	--	--	--
14...	1900	1520	211	0	96	34	.2	11	48
21...	1230	1880	206	0	93	37	.3	7.7	34
JULY									
06...	1230	1780	200	10	110	46	.5	8.5	38
21...	1000	6520	128	0	44	16	.3	9.0	40
AUG.									
02...	--	586	164	0	62	20	.3	5.0	22
30...	1310	558	192	8	100	42	.6	1.7	7.6
SEP.									
14...	1600	12700	220	0	110	49	.7	1.8	8.1
21...	1640	11200	148	0	56	17	.2	4.0	18

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAR. 4, 1973	1115	3.5	15700	728	30900	76	87	91	96	97	98	100	--	--	--	--
APR. 9......	1105	8.0	20900	438	24700	65	78	86	92	97	99	100	--	--	--	--
APR. 23......	1610	10.5	47400	843	108000	67	79	84	89	93	95	98	99	100	--	--
JULY 18......	1445	27.0	13200	468	16700	79	89	93	96	97	98	99	100	--	--	--

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

EXTREMES.--Period of record--Continued

pH (1966-67): Maximum, 11.1 Nov. 7, 1966; minimum, 6.1 Feb. 6, May 12, 14, 1967.

Dissolved oxygen (1966-68): Maximum, 15.0 mg/l Oct. 4, 1966, Jan. 2, 6, 1967, Apr. 28, 1968; minimum, 3.1 mg/l May 17, 1968.

Water temperatures (1950-69): Maximum, 34.0°C July 1, 1963; minimum, freezing point on many days during winter periods.

Sediment concentrations: Maximum daily, 2,240 mg/l Mar. 26, 1954; minimum daily, 1 mg/l on many days during 1953, 1955 and 1963.

Sediment discharges: Maximum daily, 208,000 tons Feb. 12, 1959; minimum daily, 0.26 ton Sept. 18, 1955.

REMARKS.--Continuous water-quality recorder operated since May 1963. Maximum recorded pH of 11.4 occurred Jan. 16, 1965. Minimum recorded pH of 5.0 occurred Nov. 24, 1968. Minimum recorded dissolved oxygen concentration of 0.3 mg/l occurred Nov. 10, 1965. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Flow affected by ice Nov. 21, Nov. 24 to Dec. 7, Dec. 24-30, Jan. 14-20, Jan. 26 to Mar. 1.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
05...	.39	1.2	506	280	120	774	--	--
14...	--	--	--	--	--	--	<.5	10
20...	.28	.86	432	260	110	651	--	--
NOV.								
02...	.46	1.4	418	260	96	640	--	--
24...	.63	1.9	476	300	110	752	--	--
DEC.								
08...	.52	1.6	522	340	150	813	--	--
15...	.45	1.4	382	260	130	578	--	--
JAN.								
12...	.090	.28	436	300	150	636	--	--
26...	.10	.31	466	320	160	717	--	--
FEB.								
14...	.50	1.6	532	330	160	781	--	--
23...	.65	2.0	584	380	180	862	--	--
MAR.								
01...	.76	2.3	542	330	160	872	--	--
15...	.090	.28	316	230	120	484	--	--
APR.								
05...	.11	.33	414	320	160	658	--	--
24...	.90	2.8	230	170	75	355	--	--
MAY								
10...	.10	.30	418	310	130	634	--	--
22...	.25	.76	354	250	110	532	--	--
JUNE								
08...	--	--	--	--	--	--	<.5	6.0
14...	.15	.46	446	320	150	673	--	--
21...	.32	.97	422	290	120	646	--	--
JULY								
06...	.37	1.1	382	320	140	695	--	--
21...	.42	1.3	218	180	75	394	--	--
AUG.								
02...	.34	1.0	258	220	86	459	--	--
30...	.36	1.1	340	260	88	618	--	--
SEP.								
14...	.56	1.7	356	280	100	676	--	--
21...	.32	1.0	214	200	79	410	--	--

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	890	860	690	630	690	670	---	---	---	---	960	860
2	890	840	700	650	680	670	---	---	---	---	910	810
3	870	820	710	650	700	680	---	---	---	---	---	---
4	850	810	720	680	720	700	---	---	---	---	---	---
5	830	800	---	---	730	700	530	520	---	---	---	---
6	---	---	---	---	720	680	550	530	---	---	---	---
7	---	---	---	---	730	680	560	550	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	680	650	---	---	---	---	---	---	600	540
10	---	---	700	640	---	---	---	---	---	---	600	590
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	680	560	640	600	---	---	---	---
13	---	---	---	---	600	560	700	640	---	---	---	---
14	---	---	770	730	610	570	730	660	---	---	590	520
15	760	700	810	760	630	590	680	660	---	---	580	430
16	760	690	820	660	640	580	---	---	---	---	520	460
17	750	680	740	720	600	540	---	---	835	800	515	500
18	740	640	770	730	540	480	---	---	830	810	500	400
19	700	640	770	720	510	480	---	---	865	840	500	400
20	700	640	770	750	530	510	630	600	890	860	510	440
21	710	640	770	730	570	530	640	580	930	890	550	510
22	690	640	740	710	580	520	680	600	900	880	570	440
23	670	480	740	700	550	530	680	640	900	880	560	460
24	660	490	730	700	560	550	680	600	890	880	580	460
25	670	540	730	710	580	560	745	630	955	890	580	470
26	680	610	730	700	610	580	770	680	950	920	600	500
27	680	610	710	690	620	600	740	710	970	940	600	500
28	680	630	710	680	680	610	730	715	980	960	600	480
29	680	670	700	660	630	590	730	710	1000	950	615	500
30	690	590	690	670	660	580	---	---	---	---	620	500
31	690	620	---	---	700	610	---	---	---	---	660	580
MONTH	---	---	---	---	730	480	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	680	610	540	510	620	560	660	600	---	---	593	569
2	630	580	590	540	640	590	640	620	---	---	602	462
3	690	580	630	590	680	600	660	610	---	---	536	521
4	680	590	630	600	690	600	660	630	---	---	567	536
5	710	570	620	600	700	600	660	630	---	---	582	546
6	710	600	630	620	680	630	700	650	---	---	636	564
7	700	580	670	630	660	610	700	600	---	---	676	515
8	700	580	670	660	690	600	690	520	---	---	702	656
9	700	530	670	660	690	620	620	510	---	---	685	649
10	530	420	670	620	690	650	610	460	---	---	680	647
11	480	400	680	630	680	660	560	470	---	---	650	552
12	510	400	730	640	690	670	590	490	---	---	578	557
13	520	480	630	600	690	680	590	420	---	---	623	558
14	530	430	610	550	700	650	---	---	---	---	621	521
15	510	400	570	550	680	660	---	---	---	---	563	445
16	440	430	590	550	690	660	---	---	---	---	512	379
17	440	430	610	570	690	670	---	---	638	546	463	371
18	450	440	640	580	690	680	---	---	633	567	413	376
19	460	445	580	550	700	680	---	---	626	585	443	412
20	480	440	570	520	740	660	---	---	676	615	446	386
21	480	380	550	490	680	650	419	393	712	676	420	365
22	480	370	560	490	660	620	446	419	795	712	420	416
23	410	350	560	520	630	600	465	312	781	744	---	---
24	380	315	570	520	620	600	477	465	814	780	---	---
25	370	320	600	540	630	600	476	312	782	712	---	---
26	390	300	620	580	630	590	449	312	712	678	---	---
27	420	360	620	540	620	580	449	441	700	559	---	---
28	450	420	620	520	670	560	---	---	559	495	---	---
29	480	440	610	560	680	600	---	---	570	539	---	---
30	510	480	600	530	650	600	---	---	603	563	---	---
31	---	---	600	560	---	---	---	---	590	558	---	---
MONTH	710	300	730	490	740	560	---	---	---	---	---	---

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.2	10.6	8.2	8.5	8.3	---	---	---	---	---	---
2	10.8	8.3	10.9	8.2	8.5	8.3	---	---	---	---	---	---
3	10.9	8.4	11.0	9.1	8.5	8.3	---	---	---	---	---	---
4	10.8	8.2	11.0	10.0	8.5	8.3	---	---	---	---	---	---
5	8.4	8.1	---	---	8.5	8.3	10.7	8.4	---	---	---	---
6	---	---	---	---	8.5	8.3	10.7	8.9	---	---	---	---
7	---	---	---	---	8.5	8.3	10.7	8.6	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	8.6	8.5	---	---	---	---
13	---	---	---	---	---	---	9.0	8.5	---	---	---	---
14	---	---	---	---	---	---	9.2	8.5	---	---	---	---
15	11.0	8.5	---	---	---	---	10.7	8.6	---	---	---	---
16	11.0	9.1	---	---	---	---	---	---	---	---	---	---
17	11.0	8.1	---	---	---	---	---	---	---	---	---	---
18	11.0	8.4	---	---	---	---	---	---	---	---	---	---
19	11.0	10.5	---	---	---	---	---	---	---	---	---	---
20	11.0	8.6	---	---	---	---	8.7	7.8	---	---	---	---
21	11.0	9.0	---	---	---	---	8.7	7.9	---	---	---	---
22	9.7	8.4	---	---	---	---	8.7	7.5	---	---	---	---
23	9.2	8.6	---	---	---	---	7.8	7.5	---	---	---	---
24	9.0	8.5	8.5	8.3	---	---	8.7	7.5	---	---	---	---
25	10.9	8.1	8.5	8.3	---	---	8.7	7.6	---	---	---	---
26	10.7	8.4	8.5	8.3	---	---	9.7	7.6	---	---	---	---
27	8.4	7.8	8.5	8.3	---	---	9.0	7.6	---	---	---	---
28	10.0	8.0	8.5	8.3	---	---	8.3	7.6	---	---	---	---
29	10.2	7.9	8.5	8.3	---	---	9.7	7.5	---	---	---	---
30	10.4	8.0	8.5	8.3	---	---	---	---	---	---	---	---
31	10.6	8.4	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.0	7.4	8.7	7.8	10.2	8.2	---	---	7.3	6.3
2	---	---	9.5	7.4	8.8	7.8	9.2	8.4	---	---	6.7	6.3
3	---	---	8.8	8.1	8.7	7.7	9.6	8.2	---	---	8.0	6.1
4	---	---	8.6	8.2	8.8	7.4	9.1	8.1	---	---	8.5	7.0
5	---	---	9.1	7.4	8.1	7.3	9.1	8.2	---	---	8.7	7.1
6	---	---	8.6	7.4	8.1	7.4	9.2	8.2	---	---	8.5	7.3
7	---	---	8.8	8.2	8.0	7.4	9.2	8.2	---	---	8.1	7.3
8	---	---	8.9	8.0	8.0	7.5	9.9	8.5	---	---	7.8	7.4
9	---	---	8.3	7.5	7.9	7.4	10.0	8.3	---	---	7.8	7.1
10	---	---	8.7	7.6	8.0	7.6	9.2	8.2	---	---	7.8	6.9
11	---	---	9.2	8.2	8.1	7.6	8.8	8.1	---	---	7.8	6.9
12	---	---	8.8	8.2	8.6	7.5	9.6	8.2	---	---	7.7	7.0
13	7.7	7.3	9.3	8.0	8.6	7.5	9.9	8.5	---	---	7.9	7.2
14	7.4	7.2	10.8	8.0	9.5	7.9	---	---	---	---	7.7	6.7
15	8.4	6.5	10.0	7.7	8.5	8.0	---	---	---	---	6.7	6.2
16	7.3	6.6	8.1	7.6	9.2	8.2	---	---	---	---	7.6	6.6
17	7.3	6.8	7.8	7.3	8.7	8.0	---	---	7.2	6.8	7.3	6.6
18	7.0	6.8	7.7	7.1	8.9	7.8	---	---	7.4	7.0	7.4	6.5
19	9.6	6.9	7.3	7.0	9.2	7.9	---	---	7.4	7.1	7.9	6.1
20	7.9	6.9	7.2	7.0	10.2	8.4	---	---	7.5	6.9	8.1	6.4
21	7.9	7.3	7.1	7.0	10.0	8.2	8.1	7.5	7.6	6.9	7.5	6.5
22	9.9	7.3	7.5	7.0	8.5	7.6	8.3	7.6	7.3	6.9	7.3	6.6
23	9.6	7.2	7.8	7.4	7.6	7.3	8.4	7.7	7.4	7.0	---	---
24	8.3	7.0	7.8	7.5	7.9	7.5	8.4	7.7	7.4	7.0	---	---
25	8.4	6.9	7.9	7.6	8.6	7.6	8.6	7.6	8.0	6.9	---	---
26	8.0	6.8	8.1	7.9	9.7	8.1	8.9	8.1	8.4	6.8	---	---
27	9.0	7.2	8.2	7.8	10.1	7.9	8.4	8.0	6.9	6.5	---	---
28	9.2	7.2	8.5	8.0	9.9	8.2	---	---	6.9	6.2	---	---
29	7.7	7.0	8.7	8.0	10.7	8.4	---	---	7.6	6.4	---	---
30	7.9	7.2	9.5	8.3	10.5	8.4	---	---	7.0	6.3	---	---
31	---	---	8.7	8.0	---	---	---	---	6.9	6.2	---	---
MONTH	---	---	10.8	7.0	10.7	7.3	---	---	---	---	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.5	5.2	7.5	4.6	---	---	---	---	8.8	6.6
2	---	---	7.3	4.9	9.3	6.3	---	---	---	---	7.0	6.6
3	---	---	8.0	4.8	9.3	8.3	---	---	---	---	---	---
4	---	---	7.9	4.5	8.6	6.0	---	---	---	---	---	---
5	---	---	---	---	7.0	5.0	10.4	10.1	---	---	---	---
6	---	---	---	---	6.0	4.7	10.6	8.6	---	---	---	---
7	---	---	---	---	5.6	3.9	10.2	8.7	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	11.2	8.6
10	---	---	13.4	8.8	---	---	---	---	---	---	10.1	6.3
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	7.9	6.7	10.3	8.6	---	---	---	---
13	---	---	---	---	7.7	6.9	8.1	7.7	---	---	---	---
14	---	---	9.6	5.8	7.6	7.4	11.8	8.5	---	---	12.0	9.3
15	12.8	5.2	10.2	7.1	7.4	6.8	12.5	10.3	---	---	9.9	8.4
16	12.2	5.0	10.8	6.3	7.6	6.9	---	---	---	---	8.7	8.3
17	10.8	4.0	13.0	7.9	7.5	6.5	---	---	14.9	14.4	9.0	8.4
18	9.9	3.3	11.8	5.4	7.7	6.5	---	---	15.0	14.5	9.0	8.1
19	9.8	2.6	8.8	5.3	7.8	6.2	---	---	15.0	14.6	9.2	7.4
20	8.7	3.7	9.6	5.6	7.7	5.8	15.0	14.4	15.0	12.7	9.1	7.7
21	8.6	2.9	9.7	6.1	7.5	5.7	15.0	13.1	13.0	11.0	8.7	7.4
22	5.1	2.1	10.4	7.8	9.3	6.0	14.8	13.3	12.5	11.3	9.9	7.5
23	7.9	3.5	10.9	8.1	9.2	8.4	14.3	11.7	12.6	11.0	11.8	8.7
24	8.7	4.1	8.5	4.7	8.4	8.0	14.3	12.4	11.9	10.8	9.6	7.9
25	7.6	2.0	6.0	3.9	8.5	7.7	15.0	13.0	11.3	9.3	9.3	8.1
26	6.9	2.4	6.5	3.9	7.8	7.4	15.0	11.7	10.5	9.1	9.2	8.0
27	7.4	2.3	6.2	3.9	7.6	6.1	14.1	11.8	10.6	8.5	8.8	7.4
28	6.8	3.1	6.4	3.8	8.1	7.0	13.8	12.1	9.8	8.0	8.9	7.9
29	4.0	2.9	5.2	3.7	9.0	8.0	14.0	11.8	9.9	7.5	9.1	8.5
30	5.0	4.2	6.3	4.1	8.8	7.4	---	---	---	---	9.4	8.5
31	7.6	4.2	---	---	8.3	7.2	---	---	---	---	9.1	7.7
MONTH	---	---	---	---	9.3	3.9	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.8	8.1	5.6	4.8	8.8	7.4	9.1	7.4	---	---	14.8	5.4
2	8.9	8.4	5.8	5.3	8.6	7.2	8.5	7.5	---	---	10.2	4.9
3	8.9	8.0	6.7	5.7	8.1	6.4	9.0	8.2	---	---	12.9	5.8
4	8.6	7.7	6.8	5.8	7.4	5.8	9.8	8.7	---	---	15.0	6.7
5	8.4	7.3	6.0	5.2	6.6	5.3	10.0	8.7	---	---	15.0	7.4
6	8.5	7.2	6.5	5.3	7.3	5.5	12.1	7.9	---	---	15.0	6.7
7	9.5	8.1	7.2	6.0	6.6	6.2	11.7	10.4	---	---	15.0	6.7
8	9.5	8.2	7.2	7.0	8.4	6.0	11.5	10.4	---	---	15.0	6.1
9	9.1	7.4	7.7	7.2	---	---	10.9	10.0	---	---	15.0	6.5
10	8.5	6.0	8.3	7.3	---	---	10.8	9.5	---	---	15.0	6.3
11	7.8	5.7	9.0	7.5	---	---	10.3	8.9	---	---	12.4	5.4
12	7.6	5.4	9.2	8.2	---	---	9.8	9.0	---	---	11.4	4.8
13	10.6	6.0	8.2	7.7	---	---	9.8	8.2	---	---	9.6	5.0
14	10.6	9.3	7.7	6.2	---	---	---	---	---	---	8.4	4.5
15	9.4	7.2	7.5	6.6	---	---	---	---	---	---	---	---
16	7.3	6.5	7.6	6.7	---	---	---	---	---	---	---	---
17	8.1	6.6	7.5	6.5	---	---	---	---	15.0	4.6	6.5	4.8
18	8.1	7.8	7.6	6.3	---	---	---	---	15.0	5.7	5.4	3.3
19	8.9	7.8	7.3	7.2	---	---	---	---	12.9	6.4	5.3	3.2
20	8.7	7.0	7.3	6.9	---	---	---	---	12.9	6.1	9.4	4.8
21	9.9	7.2	7.2	6.8	---	---	5.8	5.5	12.4	5.5	6.4	1.2
22	7.2	6.5	7.4	7.0	8.5	7.5	6.0	5.3	12.2	3.1	7.7	1.7
23	6.8	6.0	7.1	6.7	8.7	7.5	5.7	5.2	12.0	4.5	---	---
24	7.0	6.4	7.5	6.8	8.3	7.2	5.9	5.3	13.2	6.1	---	---
25	7.6	6.5	8.5	6.8	8.3	6.9	6.3	5.9	12.0	6.4	---	---
26	7.2	5.5	10.2	7.2	7.5	6.5	7.8	6.2	12.0	6.2	---	---
27	7.0	4.8	10.7	7.3	7.8	6.3	7.8	7.0	11.2	6.1	---	---
28	6.5	4.7	10.4	6.8	7.3	6.1	---	---	12.9	7.0	---	---
29	5.4	4.8	10.9	6.5	7.4	5.9	---	---	14.5	7.3	---	---
30	5.6	4.5	9.5	5.9	8.4	7.0	---	---	15.0	6.9	---	---
31	---	---	8.5	6.5	---	---	---	---	15.0	6.4	---	---
MONTH	10.6	4.5	10.9	4.8	---	---	---	---	---	---	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	26.5	23.0	22.5	17.0	7.0	2.0	---	---	---	---	6.5	4.0
2	27.0	23.0	20.0	16.0	6.5	2.0	---	---	---	---	6.0	4.0
3	27.0	23.5	20.5	16.5	5.0	3.0	---	---	---	---	---	---
4	25.5	23.0	19.5	16.0	5.5	2.0	---	---	---	---	---	---
5	24.0	22.5	---	---	5.0	4.0	2.5	1.5	---	---	---	---
6	---	---	---	---	5.5	4.5	2.0	1.0	---	---	---	---
7	---	---	---	---	7.0	5.0	1.5	1.0	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	7.5	6.0	---	---	---	---	---	---	6.0	3.0
10	---	---	9.5	6.0	---	---	---	---	---	---	9.0	4.5
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	9.0	7.0	2.5	1.5	---	---	---	---
13	---	---	---	---	9.5	8.0	2.5	1.5	---	---	---	---
14	---	---	16.5	11.5	9.0	8.0	2.0	1.0	---	---	2.5	2.5
15	19.0	15.5	16.0	12.0	10.0	8.0	1.5	1.0	---	---	4.0	2.5
16	19.5	15.0	18.5	11.5	9.5	8.0	---	---	---	---	5.0	3.5
17	19.0	15.5	14.0	10.0	8.0	7.0	---	---	0.0	0.0	5.5	4.5
18	20.5	16.0	14.5	10.0	7.0	6.5	---	---	0.0	0.0	5.0	3.0
19	21.0	15.5	13.0	10.0	7.5	6.0	---	---	0.0	0.0	5.0	3.0
20	21.0	15.0	11.0	9.0	8.0	7.0	0.0	0.0	0.5	0.0	6.0	4.0
21	21.0	16.5	10.0	5.0	9.0	7.5	0.0	0.0	1.0	0.0	8.0	5.0
22	22.5	19.0	7.5	3.5	8.5	3.5	0.0	0.0	2.5	0.0	8.0	6.0
23	22.0	17.5	6.0	3.0	4.0	3.5	0.0	0.0	0.5	0.0	6.0	5.5
24	18.0	17.5	6.0	3.0	5.5	4.0	0.0	0.0	0.5	0.0	7.0	5.0
25	19.0	17.5	5.5	3.0	5.5	4.0	0.0	0.0	2.5	0.0	7.5	5.5
26	19.5	17.5	6.0	3.5	11.0	5.0	0.0	0.0	3.0	0.5	8.0	6.0
27	19.0	17.0	5.5	4.0	11.0	8.0	0.0	0.0	3.5	1.0	8.0	6.0
28	26.5	18.0	6.5	4.0	11.0	8.0	0.0	0.0	5.5	2.5	7.5	5.0
29	26.5	17.0	5.5	4.0	9.0	3.0	0.0	0.0	5.5	3.0	6.5	4.0
30	17.5	17.0	6.0	3.5	5.5	3.0	---	---	---	---	6.5	6.0
31	22.5	17.0	---	---	5.5	4.0	---	---	---	---	8.5	6.0
MONTH	---	---	---	---	11.0	2.0	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	17.0	14.5	19.5	17.0	23.0	20.5	---	---	31.0	24.5
2	8.5	7.0	17.0	15.0	20.0	18.0	22.5	21.5	---	---	26.0	21.5
3	10.0	7.5	17.0	15.0	20.5	18.5	22.5	20.5	---	---	23.5	21.0
4	11.0	9.5	11.5	15.0	21.5	19.5	22.5	20.0	---	---	26.0	15.5
5	12.5	9.5	17.5	14.5	21.5	19.5	21.5	19.5	---	---	27.0	19.5
6	14.0	10.0	19.0	16.0	22.0	20.0	23.0	19.0	---	---	26.5	19.5
7	10.0	8.0	16.5	14.5	23.0	19.5	22.5	19.5	---	---	25.5	19.5
8	11.0	7.0	14.5	13.0	23.0	20.0	24.5	20.0	---	---	23.5	21.5
9	14.0	8.0	15.0	12.5	23.0	20.5	24.0	21.5	---	---	24.5	19.0
10	16.0	8.5	15.5	13.5	21.5	18.0	26.5	22.5	---	---	26.0	18.0
11	17.5	9.0	16.5	13.5	21.5	17.5	28.0	23.0	---	---	24.5	20.0
12	---	---	17.0	14.5	20.5	18.5	29.0	26.5	---	---	23.5	21.5
13	11.5	11.0	16.0	14.5	22.0	19.5	29.0	26.5	---	---	25.5	21.5
14	11.5	10.5	16.0	15.0	24.5	20.5	---	---	---	---	23.5	22.5
15	14.0	11.0	16.5	15.0	24.0	22.0	---	---	---	---	27.5	22.5
16	14.0	12.5	16.5	15.5	23.0	21.5	---	---	---	---	---	---
17	14.5	12.5	18.0	16.0	21.5	20.0	---	---	29.0	24.0	---	---
18	16.5	13.5	19.0	16.5	23.0	19.5	---	---	28.0	24.5	22.0	21.0
19	17.5	15.5	19.5	17.0	25.0	21.0	---	---	26.5	24.0	24.0	21.0
20	17.5	13.0	20.0	17.5	24.0	22.0	---	---	28.0	24.5	21.5	20.5
21	13.0	11.5	21.0	17.5	22.5	20.0	28.5	27.5	27.5	25.0	21.5	20.0
22	12.0	10.5	21.0	19.5	20.0	17.5	29.5	27.5	27.5	26.0	20.5	20.0
23	12.0	10.5	22.0	19.0	17.5	16.5	30.0	28.0	28.5	26.0	---	---
24	11.0	10.5	23.0	20.0	17.0	16.0	30.0	27.5	28.0	25.5	---	---
25	12.0	10.0	23.0	19.5	20.0	16.0	29.0	26.5	29.0	25.5	---	---
26	12.5	10.5	22.5	19.5	21.0	17.5	27.0	25.0	28.0	25.5	---	---
27	13.5	11.0	23.0	18.5	22.5	18.5	25.5	20.5	26.0	24.5	---	---
28	14.0	11.5	23.0	19.0	23.0	20.0	---	---	29.0	23.5	---	---
29	14.0	13.0	23.5	20.0	23.0	20.0	---	---	29.0	23.0	---	---
30	15.5	13.0	21.0	19.5	21.5	20.0	---	---	30.5	23.5	---	---
31	---	---	19.5	17.5	---	---	---	---	30.5	22.5	---	---
MONTH	17.5	7.0	23.5	12.5	25.0	16.0	---	---	---	---	---	---

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1500	47	190	405	19	21	450	10	12
2	1050	20	57	628	21	36	400	11	12
3	848	20	46	394	13	14	500	12	16
4	884	19	45	317	6	5.1	460	12	15
5	2880	48	370	259	4	2.8	450	12	15
6	1130	35	107	383	3	3.1	520	12	17
7	614	42	70	443	7	8.4	800	12	26
8	306	45	37	250	10	6.8	2230	32	193
9	350	40	38	268	12	8.7	7640	102	2100
10	339	37	34	455	11	14	10800	147	4290
11	328	33	29	418	10	11	9280	124	3110
12	339	29	27	405	9	9.8	8380	110	2490
13	405	25	27	317	9	7.7	6920	91	1700
14	443	22	26	295	9	7.2	4260	58	667
15	383	20	21	430	10	12	7000	93	1760
16	394	17	18	350	10	9.5	16300	227	9990
17	394	16	17	328	11	9.7	18200	224	11000
18	443	16	19	383	9	9.3	14100	184	7000
19	405	42	46	558	8	12	9960	134	3600
20	394	25	27	394	7	7.4	7080	92	1760
21	383	37	38	360	6	5.8	5610	76	1150
22	493	54	72	214	5	2.9	4540	62	760
23	505	47	64	232	5	3.1	3020	44	359
24	443	34	41	290	5	3.9	2200	36	214
25	902	52	127	320	6	5.2	2000	34	184
26	1390	54	203	370	6	6.0	1900	33	169
27	1170	54	171	370	7	7.0	1800	32	156
28	866	54	126	350	8	7.6	1700	31	142
29	642	54	94	340	9	8.3	1700	31	142
30	544	54	79	380	9	9.2	2100	35	198
31	544	50	73	--	--	--	7320	97	1920
TOTAL	21711	--	2339	10906	--	274.5	159620	--	55167

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14300	199	7680	1700	23	106	880	11	26
2	13200	177	6310	1500	21	85	6360	148	3290
3	9420	130	3310	1400	21	79	15500	564	23600
4	7440	100	2010	1300	21	74	19500	713	37500
5	6440	85	1480	1200	21	68	14800	562	22500
6	5820	78	1230	1100	20	59	9550	388	10000
7	5220	70	987	1000	20	54	5960	242	3890
8	4060	57	625	900	22	53	5150	146	2030
9	3480	48	451	800	66	143	4640	82	1030
10	4670	63	794	740	100	200	3940	52	553
11	7800	100	2110	660	95	169	3040	50	410
12	9150	74	1830	620	84	141	2330	50	315
13	6760	146	2660	580	71	111	5190	93	1710
14	5000	68	918	640	54	93	19200	328	17000
15	3000	44	356	860	31	72	24600	346	23000
16	2300	37	230	1500	16	65	24900	275	18500
17	1800	32	156	2000	14	76	22500	258	15700
18	1600	30	130	2100	14	79	18700	228	11500
19	1900	33	169	1800	15	73	15000	181	7330
20	2400	38	246	1600	17	73	11700	142	4490
21	3600	51	496	1400	19	72	8430	108	2460
22	3690	50	498	1300	20	70	8520	108	2480
23	5220	70	987	1200	21	68	8290	105	2350
24	7000	93	1760	1100	20	59	7760	99	2070
25	7880	101	2150	1000	15	41	6480	87	1520
26	6000	80	1300	900	10	24	5820	78	1230
27	4500	62	753	820	10	22	5150	70	973
28	3400	48	441	760	10	21	4480	61	738
29	2600	40	281	800	10	22	4290	59	683
30	2200	31	184	--	--	--	4450	61	733
31	1900	26	133	--	--	--	5330	76	1090
TOTAL	163750	--	42665	33280	--	2272	302440	--	220701

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SECIMENT DISCHARGE (TONS/CAY)
1	5680	75	1150	5360	95	1370	5500	48	713
2	4940	67	894	6200	98	1640	6840	65	1200
3	4160	58	651	5400	97	1410	5680	62	951
4	4190	58	656	4420	81	967	4190	61	690
5	4700	64	812	4060	58	636	3570	55	530
6	5120	69	954	4000	75	810	3160	47	401
7	5120	69	954	3270	78	689	2490	40	269
8	11400	180	6270	3180	73	627	2050	28	155
9	20800	452	25400	3570	70	675	1570	30	127
10	19700	576	30600	5080	79	1080	1320	27	96
11	16500	557	24800	9510	100	2570	1660	30	134
12	11800	384	12200	8520	90	2070	2130	39	224
13	12500	314	10600	6170	266	4430	1930	42	219
14	19100	389	20100	5850	120	1900	1500	40	162
15	24500	964	63800	5780	115	1790	1500	41	166
16	23000	1180	73300	8740	110	2600	3020	100	815
17	25700	935	64900	9060	110	2690	4800	78	1010
18	26100	830	58500	8520	110	2530	3630	80	784
19	23400	638	40300	6320	108	1840	2490	68	457
20	19700	490	26100	5120	104	1440	1850	70	350
21	23300	421	26500	4320	101	1180	1800	78	379
22	38400	803	83300	3510	98	929	1590	102	438
23	46900	823	104000	3180	85	730	2030	85	466
24	44400	612	73400	2570	70	486	1950	68	358
25	36200	504	49300	2100	57	323	1500	53	215
26	25500	450	31000	1730	43	201	1230	48	159
27	18000	364	17700	1520	36	148	1070	47	136
28	12400	264	8840	1430	28	108	920	44	109
29	8250	198	4410	1250	56	189	1050	40	113
30	5990	143	2310	1280	30	104	2200	70	456
31	--	--	--	2000	35	189	--	--	--
TOTAL	547450	--	863701	143020	--	38351	76220	--	12282

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SECIMENT DISCHARGE (TONS/DAY)
1	4000	142	1530	614	72	119	468	38	48
2	3420	98	905	586	58	92	426	41	47
3	2600	77	541	544	68	100	436	45	53
4	2080	68	382	455	104	128	416	44	49
5	1610	65	283	480	73	95	375	33	33
6	1730	72	336	544	70	103	332	39	35
7	1710	72	332	1980	107	572	345	49	46
8	1850	79	395	2200	121	719	317	43	37
9	1830	78	385	1800	103	501	292	33	26
10	1710	79	365	1700	101	464	293	34	27
11	1430	76	293	1180	103	328	349	35	33
12	1110	63	189	880	105	249	391	33	35
13	920	46	114	715	55	106	529	33	47
14	1110	74	222	763	38	78	8560	352	16800
15	1450	72	282	909	134	329	30300	780	63800
16	6640	153	3160	786	69	146	31500	274	23300
17	15400	230	9560	678	50	92	21700	336	19700
18	13000	402	14100	688	40	74	16200	280	12200
19	7800	238	5010	1290	67	233	15600	158	6650
20	9420	254	6460	1200	75	243	13700	103	3810
21	6840	290	5360	2300	108	671	11800	88	2800
22	6060	232	3800	2100	78	442	8530	85	1960
23	4350	187	2200	1500	55	223	4730	85	1090
24	2740	140	1040	1300	84	295	3930	88	934
25	2280	148	911	1700	81	372	3150	84	714
26	1800	137	666	1200	94	305	4130	99	1180
27	1390	125	469	1000	81	219	13400	166	6010
28	1210	144	470	800	59	127	18800	242	12300
29	1070	110	318	600	40	65	18700	198	10000
30	956	108	279	544	30	44	21900	129	7630
31	702	92	174	481	37	48	--	--	--
TCTAL	110218	--	60531	33517	--	7582	251599	--	191394

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1853731
TCTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1497259.5

04194022 MAUMEE RIVER AT TOLEDO OVERSEAS TERMINAL DOCK, AT TOLEDO, OHIO

LOCATION.--Lat 41°41'06", long 83°28'35", Lucas County, at Toledo Overseas Terminal dock at Toledo, about 1 mile upstream from the mouth.

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-HABLE RESIDUE (MG/L)
OCT.												
06...	--	49	210	0	120	60	2.6	11	.62	1.9	468	--
13...	--	--	184	0	100	56	--	--	--	--	--	--
20...	--	--	162	0	100	72	--	--	--	--	--	--
NOV.												
03...	0845	47	162	0	94	58	2.8	12	.60	1.8	428	8
10...	0900	--	160	0	90	54	--	--	--	--	--	30
17...	0845	--	142	0	82	58	--	--	--	--	--	22
24...	0930	--	150	0	77	58	--	--	--	--	--	37
DEC.												
01...	0900	--	186	0	94	71	--	--	--	--	--	21
08...	0900	52	196	0	110	68	1.2	5.2	.58	1.8	460	21
15...	0930	--	164	0	96	48	--	--	--	--	--	75
23...	0900	--	124	0	71	27	--	--	--	--	--	149
29...	0900	--	142	0	80	32	--	--	--	--	--	69
JAN.												
05...	0915	--	162	0	91	42	--	--	--	--	--	76
12...	0845	--	156	6	94	40	--	--	--	--	--	49
19...	0845	28	190	0	100	54	7.7	34	.52	1.6	410	22
FEB.												
16...	0845	--	192	0	110	76	--	--	--	--	--	17
23...	0900	37	216	0	120	68	7.1	31	.76	2.3	530	--
MAR.												
01...	0845	39	236	0	130	66	6.8	30	.57	1.7	556	15
22...	0900	--	134	0	73	32	--	--	--	--	--	91
29...	0930	--	162	0	87	38	--	--	--	--	--	68
APR.												
05...	0830	19	196	0	100	40	6.9	30	.28	.86	442	45
12...	0830	--	114	0	64	28	--	--	--	--	--	230
19...	0845	--	132	0	59	23	--	--	--	--	--	282
26...	0830	--	111	0	46	18	--	--	--	--	--	208
MAY												
10...	0845	--	190	0	87	32	--	--	--	--	--	68
17...	0845	--	170	0	82	32	--	--	--	--	--	50
24...	0930	18	184	0	84	37	5.8	26	.27	.82	392	121
30...	0845	--	178	0	78	37	--	--	--	--	--	52
JUNE												
07...	0830	21	230	0	100	39	5.3	24	.35	1.1	462	88
14...	0845	--	190	0	89	43	--	--	--	--	--	31
21...	0900	--	204	0	98	40	--	--	--	--	--	46
28...	0815	--	182	0	89	44	--	--	--	--	--	24
JULY												
05...	0815	23	174	0	89	44	7.9	35	.30	.91	412	54
12...	0900	--	160	4	84	39	--	--	--	--	--	--
19...	0835	--	164	0	74	34	--	--	--	--	--	--
26...	0835	--	136	0	50	22	--	--	--	--	--	--
AUG.												
02...	--	--	128	2	55	30	--	--	--	--	--	--
09...	0910	--	160	2	59	29	--	--	--	--	--	--
16...	0830	--	154	0	57	28	--	--	--	--	--	--
30...	0915	24	186	0	74	38	3.6	16	.17	.53	358	--
SEP.												
06...	0850	--	158	2	68	40	--	--	--	--	--	--
13...	1030	30	156	4	73	46	2.7	12	.29	.89	340	--
20...	0900	--	130	0	44	18	--	--	--	--	--	--
27...	0915	--	150	0	64	26	--	--	--	--	--	--

04194022 MAUMEE RIVER AT TOLEDO OVERSEAS TERMINAL DOCK, AT TOLEDO, OHIO--Continued

REMARKS.--Determinations of suspended solids and dissolved oxygen (DO) furnished by the city of Toledo, Division of Sewage Disposal. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)
OCT.											
06...	280	110	740	7.9	20.5	1.5	16	--	.12	17	25
13...	240	89	649	7.4	17.0	2.5	26	--	--	10	10
20...	230	97	691	7.4	18.0	1.0	10	--	--	15	10
NOV.											
03...	220	87	629	8.1	13.5	4.8	46	4.1	.12	10	--
10...	210	79	582	7.2	11.0	5.1	46	4.3	--	5	--
17...	200	84	585	7.1	6.0	6.9	58	6.5	--	5	--
24...	190	67	583	7.2	10.0	6.3	63	4.9	--	5	--
DEC.											
01...	220	68	692	7.3	6.5	6.0	49	5.9	--	10	--
08...	250	90	732	7.4	9.0	6.5	56	6.2	.18	15	--
15...	260	120	648	7.3	6.0	8.8	72	6.9	--	30	--
23...	220	120	459	7.2	3.5	9.9	74	4.8	--	80	--
29...	240	120	541	7.3	3.5	8.7	65	3.1	--	70	--
JAN.											
05...	260	130	591	7.4	2.0	12.2	88	3.5	--	30	90
12...	270	130	590	8.4	.5	12.8	96	3.2	--	35	65
19...	310	150	702	8.2	1.0	12.0	84	4.7	.07	15	13
FEB.											
16...	320	160	764	8.2	2.0	10.0	72	3.4	--	20	14
23...	330	150	791	7.3	1.0	--	--	--	.09	20	11
MAR.											
01...	360	170	833	7.4	2.0	8.3	60	3.5	.08	20	3
22...	230	120	507	7.2	6.5	11.3	92	3.0	--	30	70
29...	260	130	577	7.2	6.0	9.4	75	3.2	--	25	35
APR.											
05...	300	140	639	8.1	6.5	10.1	82	2.3	.06	50	25
12...	200	110	434	7.6	6.5	10.6	86	2.1	--	180	140
19...	200	92	431	7.7	15.0	7.3	72	1.2	--	150	150
26...	160	69	345	7.7	14.0	8.1	78	2.5	--	120	140
MAY											
10...	270	110	569	7.6	14.5	7.7	75	4.0	--	35	50
17...	250	110	534	8.0	17.0	8.2	84	2.4	--	35	55
24...	260	110	579	7.5	21.5	6.1	68	2.3	.06	50	25
30...	240	94	543	7.4	21.0	3.2	36	3.6	--	30	30
JUNE											
07...	320	130	676	7.8	21.5	5.6	63	2.3	.05	20	35
14...	280	120	618	7.4	21.5	4.4	49	3.3	--	25	20
21...	310	140	662	7.5	23.0	4.2	48	2.3	--	20	10
28...	270	120	622	7.4	20.5	5.1	56	1.3	--	15	15
JULY											
05...	270	130	611	8.1	21.5	5.9	66	1.9	.09	25	35
12...	270	130	588	8.3	22.0	--	--	--	--	15	15
19...	240	100	544	7.5	25.0	--	--	--	--	35	65
26...	200	88	421	7.9	27.0	--	--	--	--	40	65
AUG.											
02...	230	120	453	8.3	27.0	--	--	--	--	20	20
09...	230	96	486	8.3	22.5	--	--	--	--	25	55
16...	230	100	470	7.6	22.0	--	--	--	--	20	40
30...	250	98	552	8.2	--	--	--	--	.09	15	15
SEP.											
06...	220	87	526	8.3	22.5	--	--	--	--	10	6
13...	240	100	540	8.3	23.0	--	--	--	.07	10	5
20...	190	84	375	7.2	19.5	--	--	--	--	50	170
27...	220	97	461	8.2	18.5	--	--	--	--	40	80

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO

LOCATION.--Lat 41°41'36", long 83°28'20", on left bank at U.S. Coast Guard Station, 200 ft downstream from entrance of channel to Bay View Park Yacht Club, across the river from C. and O. docks, and 2,500 ft downstream from Toledo Sewage Disposal plant.

DRAINAGE AREA.--6,608 sq mi.

PERIOD OF RECORD.--Chemical analyses: February 1967 to September 1972.
Water temperatures: February 1967 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,070 micromhos Feb. 4; minimum, 240 micromhos Oct. 11.
Water temperatures: Maximum, 28.0°C July 25; minimum, freezing point on many days during January to March.

Period of record:
Specific conductance (1967-69, 1970-72): Maximum, 1,070 micromhos Feb. 4, 1972; minimum, 210 micromhos Dec. 23, 1967.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.							
14...	1400	--	--	--	--	--	--
18...	0945	156	0	84	57	.7	2.7
26...	1100	172	0	100	78	1.9	8.3
NOV.							
04...	1240	148	0	110	76	.9	4.7
JAN.							
24...	1115	180	0	100	49	.3	9.1
FEB.							
14...	0945	174	0	99	65	.3	9.9
28...	0945	182	8	120	67	.4	8.9
MAR.							
03...	1400	191	5	160	76	1.3	7.6
20...	1000	124	0	68	25	.2	11
APR.							
10...	0945	186	0	110	40	.3	9.3
24...	0930	120	0	43	16	.2	7.4
MAY							
02...	1330	141	3	70	31	.4	7.7
15...	0930	228	0	110	38	.4	5.9
JUNE							
05...	0940	184	6	90	32	.3	5.6
07...	1415	--	--	--	--	--	--
12...	0930	208	0	100	40	.5	9.5
JULY							
03...	1020	184	0	92	39	.4	9.5
24...	1015	140	0	51	21	.3	7.5
AUG.							
07...	1205	126	4	62	33	.4	8.3
30...	1030	158	5	71	38	.4	4.4
SEP.							
05...	1415	190	0	78	41	.4	3.0
18...	1515	116	0	45	18	.3	3.7

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1967-68): Maximum, 14.4 mg/l Sept. 4, 1967; minimum, 0.0 mg/l on many days during June to September 1967.
Water temperatures (1967-69, 1970-72): Maximum,30.0°C Aug. 24, 1968; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since February 1967. Maximum recorded specific conductance value of 980 micromhos occurred Jan. 31, 1970. Maximum recorded dissolved oxygen concentrations of 15.0 mg/l occurred on several days during 1970-72. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. Considerable industrial pollution from upstream and Toledo sources and from sewage disposal plant. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
14...	--	--	--	--	--	<.5	10
18...	12	370	210	82	630	--	--
26...	37	446	220	79	785	--	--
NOV.							
04...	21	456	230	110	778	--	--
JAN.							
24...	40	432	290	140	685	--	--
FEB.							
14...	44	498	290	150	696	--	--
28...	39	536	320	160	807	--	--
MAR.							
03...	33	590	350	180	930	--	--
20...	49	314	220	120	498	--	--
APR.							
10...	41	434	300	150	682	--	--
24...	32	252	180	82	386	--	--
MAY							
02...	34	316	210	90	526	--	--
15...	26	438	310	120	711	--	--
JUNE							
05...	25	382	280	120	614	--	--
07...	--	--	--	--	--	<.5	9.0
12...	42	430	310	140	702	--	--
JULY							
03...	42	396	280	130	643	--	--
24...	33	272	190	76	437	--	--
AUG.							
07...	37	306	190	80	483	--	--
30...	19	328	220	82	554	--	--
SEP.							
05...	13	366	230	74	603	--	--
18...	16	208	160	65	352	--	--

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	640	500	860	650	700	620	660	520	780	760	880	640
2	690	570	900	400	790	640	710	620	800	760	---	---
3	720	620	810	520	840	540	660	510	920	770	950	850
4	760	690	850	290	710	450	630	620	1070	760	880	640
5	790	680	870	350	650	450	740	610	920	730	760	530
6	790	640	840	420	750	620	740	600	810	720	780	540
7	760	640	850	370	700	550	810	520	800	720	720	530
8	790	520	690	380	650	490	620	530	830	730	700	530
9	750	490	660	490	---	---	660	560	810	750	670	530
10	670	400	760	320	870	470	720	560	820	720	650	520
11	830	240	550	300	900	550	680	560	810	700	690	550
12	510	350	620	510	980	760	700	600	780	670	720	550
13	670	290	550	400	980	790	680	610	770	670	550	500
14	690	430	650	360	830	630	880	620	750	690	750	530
15	650	410	640	510	750	450	790	680	830	700	660	590
16	620	420	580	360	560	440	810	680	870	670	620	480
17	530	400	630	490	750	520	800	720	750	640	530	500
18	640	400	800	530	780	540	860	730	890	700	540	480
19	660	460	870	570	750	510	940	760	850	780	510	490
20	650	460	890	550	680	490	840	740	840	730	520	490
21	650	530	800	410	610	480	830	760	860	800	670	490
22	640	490	570	450	530	500	840	720	840	660	680	500
23	670	450	590	430	600	440	760	710	800	570	620	520
24	640	420	600	400	550	450	820	680	910	750	550	510
25	790	550	630	520	590	460	860	600	850	650	---	---
26	870	690	---	---	600	520	750	580	800	730	---	---
27	920	720	---	---	590	520	---	---	1010	740	570	550
28	920	670	---	---	780	540	---	---	960	700	610	540
29	810	620	---	---	820	330	---	---	860	650	590	450
30	810	720	700	580	580	280	---	---	---	---	610	480
31	890	770	---	---	550	370	---	---	---	---	710	480
MONTH	920	240	900	290	980	280	940	510	1070	570	950	450

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	670	490	552	384	663	597	528	450	588	504	---	---
2	710	600	572	422	699	588	597	522	546	510	---	---
3	670	550	657	510	690	618	627	594	---	---	---	---
4	672	590	612	537	651	621	597	543	---	---	---	---
5	692	640	618	531	645	618	654	588	---	---	645	579
6	708	602	678	582	660	588	672	630	---	---	663	558
7	---	---	---	---	720	621	714	660	678	480	648	477
8	702	648	---	---	762	669	729	660	---	---	597	528
9	714	662	---	---	786	573	690	654	---	---	561	459
10	734	498	666	552	702	636	705	624	---	---	567	477
11	512	414	748	666	726	678	636	498	---	---	603	528
12	542	456	708	627	756	708	537	354	---	---	609	525
13	552	428	801	654	726	669	438	357	---	---	624	453
14	486	458	795	711	711	627	456	348	---	---	558	453
15	542	458	801	774	732	621	414	357	---	---	639	540
16	480	400	798	678	663	606	393	336	---	---	555	336
17	474	396	705	609	657	597	453	390	---	---	435	309
18	470	416	633	585	642	606	540	453	---	---	378	315
19	604	426	621	597	651	639	555	513	---	---	363	309
20	468	414	621	591	---	---	513	399	---	---	378	315
21	428	410	651	621	---	---	489	393	---	---	471	363
22	476	414	633	603	726	708	480	414	---	---	513	429
23	414	324	621	603	750	699	483	414	---	---	555	453
24	397	373	621	600	744	705	504	447	---	---	552	465
25	391	371	618	591	768	660	432	363	---	---	551	499
26	407	377	621	591	684	597	507	402	---	---	538	430
27	415	389	621	597	603	492	498	465	---	---	462	438
28	455	395	621	606	510	453	495	486	---	---	476	443
29	455	403	639	597	456	417	534	489	---	---	529	445
30	447	409	633	543	453	423	534	501	---	---	577	447
31	---	---	615	549	---	---	531	510	---	---	---	---
MONTH	734	324	801	384	786	417	729	336	---	---	663	309
YEAR	1070	240										

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

pH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.4	7.3	7.1	7.0	7.4	6.7	7.3	7.2	---	---	7.4	7.4
2	7.5	7.3	7.2	7.1	7.4	7.2	7.2	7.2	---	---	---	---
3	7.4	7.3	7.3	7.2	7.3	7.1	7.3	7.2	---	---	7.7	7.2
4	7.4	7.3	7.4	7.3	7.3	7.2	7.4	7.2	---	---	7.6	7.2
5	7.3	7.2	7.4	7.3	7.3	7.2	7.3	7.2	---	---	7.5	7.4
6	7.3	7.2	7.4	7.3	7.3	7.2	7.5	7.3	---	---	7.5	7.4
7	7.4	7.3	7.4	7.3	7.7	7.2	7.4	7.2	---	---	7.5	7.4
8	7.4	7.3	7.4	6.9	7.4	7.3	7.3	7.1	---	---	7.5	7.4
9	7.4	7.3	7.0	6.9	---	---	7.3	7.2	---	---	7.6	7.4
10	7.4	7.3	7.0	6.9	7.6	7.1	7.3	7.2	---	---	7.4	7.4
11	7.6	7.4	7.0	6.9	7.5	7.2	7.2	7.2	---	---	7.5	7.4
12	7.6	7.5	7.0	6.9	7.5	7.2	7.2	7.2	---	---	7.4	7.4
13	7.7	7.5	7.0	6.9	7.4	7.2	7.2	7.2	---	---	7.6	7.4
14	7.6	7.5	7.1	7.0	7.3	7.3	7.3	7.2	---	---	7.6	7.5
15	7.6	7.4	7.2	7.0	7.3	7.2	7.4	7.3	---	---	7.6	7.5
16	7.4	7.2	7.3	7.1	7.3	7.2	7.6	7.4	7.5	7.4	7.6	7.5
17	7.3	7.2	7.3	7.2	7.3	7.2	7.6	7.3	7.5	7.4	7.5	7.4
18	7.3	7.1	7.3	7.1	7.3	7.2	7.4	7.3	7.5	7.4	7.6	7.5
19	7.2	7.1	7.3	7.1	7.3	7.3	7.4	7.3	7.5	7.4	7.6	7.4
20	7.1	7.0	7.4	7.2	7.5	7.3	7.3	7.2	7.5	7.4	7.5	7.4
21	7.1	7.0	7.5	7.2	7.4	7.2	7.3	7.2	7.5	7.4	7.5	7.4
22	7.0	7.0	7.3	7.2	7.3	7.2	7.3	7.3	7.5	74.0	7.6	7.5
23	7.1	6.9	7.4	7.3	7.3	7.2	7.3	7.3	7.5	74.0	7.5	7.5
24	7.1	7.0	7.4	7.3	7.3	7.2	7.4	7.2	7.4	74.0	7.5	7.5
25	7.0	6.9	7.3	7.3	7.2	7.2	7.5	7.3	7.4	74.0	---	---
26	7.1	7.0	---	---	7.2	7.2	7.4	7.3	7.4	74.0	---	---
27	7.1	7.0	---	---	7.2	7.2	---	---	7.5	74.0	7.7	7.4
28	7.1	7.0	---	---	7.2	7.2	---	---	7.5	74.0	7.5	7.4
29	7.1	7.0	---	---	7.3	7.2	---	---	7.4	74.0	7.6	7.4
30	7.1	7.0	7.7	7.0	7.3	7.2	---	---	---	---	7.5	7.4
31	7.3	7.0	---	---	7.3	7.2	---	---	---	---	7.5	7.4
MONTH	7.7	6.9	7.7	6.9	7.7	6.7	7.6	7.1	---	---	7.7	7.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.4	---	---	7.5	7.4	7.4	7.1	7.0	6.9	7.7	7.2
2	7.5	7.4	---	---	7.9	7.4	7.5	7.2	7.0	7.0	7.5	7.3
3	7.6	7.4	---	---	7.9	7.5	7.5	7.3	---	---	7.6	7.3
4	7.6	7.5	---	---	7.8	7.4	7.6	7.4	---	---	7.6	7.3
5	---	---	---	---	7.8	7.6	7.7	7.4	---	---	7.8	7.6
6	---	---	---	---	7.9	7.6	7.6	7.4	---	---	7.8	7.7
7	---	---	---	---	8.0	7.6	7.5	7.3	7.4	7.1	7.8	7.7
8	---	---	---	---	7.7	7.4	7.5	7.3	7.2	7.1	8.1	7.8
9	---	---	---	---	7.7	7.4	7.5	7.2	---	---	7.9	7.6
10	---	---	---	---	7.7	7.4	7.4	7.2	---	---	7.9	7.6
11	---	---	---	---	7.5	7.3	7.4	7.2	---	---	7.7	7.5
12	---	---	---	---	7.4	7.3	7.3	7.1	---	---	7.9	7.5
13	---	---	---	---	7.5	7.3	7.3	7.2	---	---	8.0	7.8
14	---	---	---	---	7.6	7.3	7.3	7.1	---	---	8.2	7.8
15	---	---	---	---	7.4	7.3	7.2	7.0	---	---	8.7	7.9
16	---	---	---	---	7.7	7.3	7.1	7.0	---	---	8.7	8.2
17	---	---	---	---	7.6	7.4	7.5	7.1	---	---	8.3	7.8
18	---	---	7.6	7.4	7.5	7.3	7.6	7.3	---	---	8.5	7.9
19	---	---	7.9	7.5	7.6	7.4	7.3	7.2	---	---	8.5	8.0
20	---	---	8.1	7.5	---	---	7.3	7.0	---	---	8.4	8.0
21	---	---	7.7	7.4	---	---	7.1	7.0	---	---	8.8	7.9
22	---	---	7.9	7.6	7.5	7.4	7.0	7.0	---	---	8.7	7.9
23	---	---	8.3	7.8	7.7	7.3	7.1	7.0	---	---	8.3	7.7
24	---	---	8.2	7.4	7.7	7.4	7.1	7.0	---	---	9.0	8.2
25	---	---	8.5	7.8	8.1	7.3	7.2	7.0	---	---	8.7	7.9
26	---	---	8.3	7.7	7.6	7.4	7.1	7.0	---	---	8.4	7.8
27	---	---	7.9	7.5	7.6	7.3	7.2	7.0	---	---	7.8	6.9
28	---	---	7.8	7.4	7.8	7.3	7.1	7.0	---	---	8.5	6.3
29	---	---	7.5	7.4	7.8	7.4	7.1	6.9	---	---	8.5	7.7
30	---	---	7.5	7.3	7.6	7.4	7.0	7.0	7.6	7.2	8.3	7.1
31	---	---	7.5	7.3	---	---	7.0	6.9	7.9	7.3	---	---
MONTH	---	---	---	---	8.1	7.3	7.7	6.9	---	---	9.0	6.3

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.2	0.4	5.6	2.1	5.8	3.2	12.3	10.8	14.7	14.0	13.4	10.6
2	1.6	0.6	4.2	2.5	5.6	1.6	12.5	11.3	14.5	13.7	---	---
3	0.6	0.6	5.3	2.0	7.8	1.3	---	---	14.5	13.7	14.2	9.6
4	3.4	0.6	8.0	1.6	9.8	3.6	13.3	12.4	15.0	13.5	14.1	8.7
5	1.8	0.8	7.2	2.0	10.6	5.9	13.2	11.8	15.0	14.0	14.4	11.5
6	1.7	---	5.9	3.2	7.1	2.8	14.0	12.6	14.6	13.5	14.4	12.1
7	0.9	---	9.3	2.9	9.4	3.5	14.1	12.7	14.6	13.2	14.4	11.7
8	---	---	8.6	4.6	9.4	5.6	13.9	12.8	14.2	13.4	14.5	12.7
9	---	---	7.4	4.4	---	---	14.2	13.0	14.0	13.2	14.8	12.6
10	---	---	9.9	4.3	12.1	8.1	13.7	12.6	13.4	12.4	14.1	12.2
11	8.2	2.5	10.5	6.6	13.6	10.8	13.9	12.5	12.7	11.2	13.4	11.4
12	5.6	3.2	6.7	4.7	11.8	10.1	14.1	12.8	11.9	10.7	13.4	10.0
13	5.1	2.8	9.2	5.5	11.0	10.0	13.8	12.7	11.7	9.4	14.5	13.3
14	5.3	2.3	9.7	4.5	10.6	8.7	13.7	12.1	11.8	10.9	13.9	9.7
15	5.4	1.4	5.3	4.2	11.2	7.9	14.0	12.7	11.0	9.7	13.9	12.9
16	6.6	1.4	7.9	4.0	11.9	10.3	13.7	11.9	11.4	9.7	13.6	13.0
17	9.0	4.2	5.0	3.2	12.0	10.4	12.7	11.8	12.0	10.0	13.3	11.1
18	9.6	2.5	5.4	2.6	12.0	10.8	12.4	11.1	11.3	9.5	13.3	12.4
19	9.5	1.5	5.4	2.9	11.7	10.2	14.0	11.6	13.0	10.0	13.3	12.6
20	8.2	1.3	6.6	4.6	11.9	10.4	13.2	11.9	13.1	11.6	14.0	11.9
21	6.3	1.4	8.0	4.7	12.1	10.2	13.0	12.0	13.2	10.9	12.6	9.9
22	5.6	2.0	10.7	6.2	12.1	10.8	14.0	12.0	13.7	10.6	12.1	9.9
23	7.9	1.4	10.3	7.9	12.5	9.7	14.0	13.0	14.3	10.2	12.4	11.0
24	5.4	1.9	11.3	5.7	12.9	11.3	14.1	12.9	12.2	9.9	12.1	11.8
25	3.0	1.4	8.2	5.0	13.7	10.1	15.0	12.5	13.1	10.3	---	---
26	2.9	1.3	---	---	11.4	10.2	14.9	12.0	12.6	11.5	---	---
27	4.1	1.7	---	---	11.8	9.9	---	---	12.3	10.0	11.7	10.8
28	4.4	1.9	---	---	11.5	9.9	---	---	13.9	10.1	12.0	10.9
29	4.6	1.9	---	---	12.6	9.6	---	---	13.4	9.9	12.2	9.2
30	2.5	1.9	6.8	3.3	12.9	10.9	---	---	---	---	11.8	9.7
31	2.1	2.0	---	---	13.4	11.2	---	---	---	---	11.4	9.7
MONTH	9.6	0.4	11.3	1.6	13.7	1.3	15.0	10.8	15.0	9.4	14.8	8.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.8	9.6	7.8	6.3	1.7	0.1	4.8	3.0	---	---	4.5	0.1
2	11.5	9.5	7.9	7.0	2.1	0.1	4.7	3.1	---	---	5.0	0.1
3	11.9	10.4	7.5	6.5	2.0	0.4	---	---	---	---	3.0	0.1
4	11.8	10.2	7.0	6.2	---	---	---	---	---	---	4.4	0.2
5	11.6	10.4	6.9	5.6	---	---	---	---	---	---	4.0	0.2
6	12.1	10.0	6.6	5.9	---	---	---	---	---	---	6.1	2.5
7	12.5	11.4	---	---	---	---	---	---	3.1	1.3	6.3	3.0
8	12.1	11.0	---	---	5.1	2.9	---	---	2.6	1.4	6.3	1.3
9	12.6	11.2	---	---	4.6	2.8	---	---	---	---	4.4	0.5
10	12.4	11.1	7.8	5.3	5.8	1.9	---	---	---	---	4.1	0.1
11	12.5	11.8	8.7	6.2	---	---	---	---	---	---	0.5	0.1
12	12.0	11.7	8.1	7.0	---	---	---	---	---	---	4.4	0.1
13	11.8	10.5	8.8	6.6	---	---	---	---	---	---	2.3	0.5
14	11.2	10.5	7.2	6.2	---	---	---	---	---	---	6.3	0.5
15	10.7	9.3	6.9	5.6	---	---	---	---	---	---	5.0	0.5
16	9.5	8.0	6.5	5.6	---	---	---	---	---	---	4.3	3.4
17	9.4	7.5	6.9	4.1	---	---	---	---	---	---	4.3	2.5
18	9.5	7.8	7.2	4.5	---	---	---	---	---	---	8.0	1.5
19	9.5	8.2	8.5	4.6	---	---	---	---	---	---	6.5	5.4
20	9.2	8.0	9.1	5.1	---	---	---	---	---	---	6.7	5.1
21	9.6	8.4	6.4	2.8	---	---	---	---	---	---	6.7	4.2
22	9.2	8.2	6.9	5.0	---	---	---	---	---	---	5.1	2.0
23	9.7	8.2	8.9	5.6	5.5	2.9	---	---	---	---	3.0	1.8
24	9.1	8.2	7.0	1.6	5.1	3.3	---	---	---	---	2.1	0.5
25	9.1	8.4	8.9	4.6	4.7	3.6	---	---	---	---	---	---
26	9.3	8.6	7.5	3.7	5.5	3.0	---	---	---	---	---	---
27	9.1	7.0	5.3	2.0	6.3	3.1	---	---	---	---	---	---
28	8.7	7.1	4.3	1.2	7.6	3.0	---	---	---	---	---	---
29	8.4	7.3	2.7	1.4	7.4	4.4	---	---	---	---	---	---
30	6.9	6.0	2.6	1.3	6.4	3.6	---	---	5.0	0.4	---	---
31	---	---	1.7	0.5	---	---	---	---	4.5	0.1	---	---
MONTH	12.6	6.0	9.1	0.5	---	---	---	---	---	---	8.0	0.1

04194023 MAUMEE RIVER AT MOUTH, AT U.S. COAST GUARD STATION AT TOLEDO, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	21.5	18.5	18.0	9.0	5.5	3.5	1.0	1.5	0.0	4.0	0.5
2	23.5	22.0	20.5	17.5	9.0	5.5	4.0	0.5	1.5	0.0	---	---
3	24.5	22.5	18.5	16.5	9.5	5.0	2.5	0.0	4.0	0.0	4.0	1.5
4	24.5	21.5	18.5	15.5	7.5	5.5	3.0	0.0	3.5	1.0	4.0	0.0
5	24.5	22.5	19.0	14.0	9.5	5.0	4.0	1.5	3.0	0.0	3.0	0.5
6	23.0	20.5	17.0	14.0	11.0	9.0	3.5	0.5	2.0	0.0	2.5	0.0
7	22.0	20.0	15.5	8.5	9.0	7.0	5.0	0.5	3.0	0.0	4.0	0.5
8	21.5	19.5	12.0	8.5	9.0	6.5	4.0	1.5	3.0	0.0	4.0	0.0
9	20.0	19.0	12.0	10.0	---	---	4.0	1.5	2.5	0.0	3.0	0.0
10	19.5	17.5	13.5	8.0	9.5	5.5	5.0	1.5	3.0	0.0	3.5	0.0
11	18.0	15.5	11.5	7.5	9.5	4.5	4.5	1.5	3.0	0.5	4.0	0.0
12	17.0	15.0	11.0	9.0	7.5	5.0	4.5	1.0	3.0	0.0	4.0	0.0
13	17.0	15.0	10.5	9.0	7.5	3.5	5.0	0.5	4.0	0.5	3.0	0.5
14	17.5	15.0	13.0	8.0	7.5	5.0	4.5	1.0	3.0	1.0	3.5	0.5
15	17.0	15.0	12.5	10.0	9.0	4.5	3.0	1.5	4.0	2.0	1.5	0.5
16	17.5	15.0	11.5	8.5	8.0	4.5	3.0	2.0	3.5	2.0	2.5	1.5
17	17.5	15.0	13.0	10.0	8.5	5.5	3.0	1.0	3.5	0.0	2.5	2.0
18	18.5	16.5	15.0	11.0	7.0	5.0	5.0	1.5	6.0	3.0	4.5	2.0
19	18.5	16.5	15.5	12.5	8.0	4.5	5.5	3.5	4.5	3.0	5.5	2.0
20	19.5	17.0	13.5	10.5	5.5	4.5	5.0	3.0	5.0	0.5	5.5	2.5
21	19.0	17.0	12.0	7.5	6.0	3.0	5.0	2.0	5.5	1.0	7.0	4.0
22	18.5	18.0	9.5	4.0	5.0	2.0	5.5	1.5	3.5	0.5	6.5	4.5
23	18.5	17.0	7.5	2.5	6.5	2.5	4.5	0.5	3.5	0.5	7.5	5.0
24	18.5	15.5	10.0	2.0	6.0	4.0	3.5	1.0	4.0	0.5	6.5	6.0
25	18.5	15.5	10.0	7.5	7.0	2.5	5.0	1.5	3.5	0.0	---	---
26	20.0	14.0	---	---	6.5	4.0	2.0	1.5	3.5	0.0	---	---
27	20.5	18.0	---	---	8.5	3.5	---	---	4.5	1.0	7.0	3.0
28	20.5	18.0	---	---	6.0	3.0	---	---	3.5	0.0	7.0	3.5
29	19.0	17.0	---	---	5.0	2.5	---	---	4.5	1.0	7.0	4.0
30	20.0	18.0	10.0	5.5	6.0	1.5	---	---	---	---	6.0	3.5
31	20.0	18.5	---	---	3.5	1.0	---	---	---	---	8.5	4.0
MONTH	24.5	14.0	20.5	2.0	11.0	1.0	5.5	0.0	6.0	0.0	8.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	4.0	20.0	17.5	21.5	20.0	21.0	20.0	26.0	25.5	25.5	23.5
2	7.5	4.5	20.0	14.5	20.5	19.0	21.0	20.5	26.0	26.0	25.0	23.0
3	7.5	4.5	16.5	14.0	20.0	19.0	21.5	20.5	---	---	24.5	22.5
4	8.0	6.0	16.5	14.5	21.0	19.5	22.0	21.0	---	---	23.5	22.5
5	10.0	7.0	17.0	14.5	21.0	20.5	22.0	20.5	---	---	24.0	22.0
6	11.0	7.0	17.0	16.0	22.0	21.0	22.0	20.5	---	---	24.0	23.0
7	7.0	4.5	---	---	22.0	21.0	22.5	21.5	24.0	23.0	24.0	22.5
8	8.0	5.5	---	---	22.5	21.5	22.0	21.0	23.5	23.0	23.5	22.5
9	8.5	5.5	---	---	22.5	21.0	22.5	21.5	---	---	23.0	21.5
10	9.0	7.0	16.5	12.0	22.5	20.0	22.0	21.0	---	---	23.5	21.5
11	10.0	8.0	16.5	14.0	22.0	20.5	22.0	21.0	---	---	23.5	22.0
12	10.5	8.0	16.0	14.0	21.0	20.5	22.5	21.5	---	---	23.0	22.5
13	13.5	10.5	16.5	15.5	21.5	20.5	23.0	21.5	---	---	23.0	21.5
14	12.5	11.0	18.0	16.5	22.5	20.5	24.0	22.5	---	---	23.5	22.5
15	15.5	13.0	18.0	16.5	22.0	21.5	23.5	22.5	---	---	22.5	21.5
16	16.0	13.5	18.0	16.5	22.5	21.0	24.5	22.5	---	---	21.5	20.5
17	17.5	13.0	18.5	16.5	22.5	21.5	25.5	23.5	---	---	21.5	19.5
18	18.5	14.5	19.5	17.0	22.5	21.0	25.5	24.5	---	---	21.5	21.0
19	19.0	16.5	20.0	18.0	23.0	22.0	26.5	24.5	---	---	21.0	21.0
20	17.0	16.0	20.0	19.0	---	---	27.0	25.5	---	---	21.0	20.5
21	16.0	14.5	21.0	19.0	---	---	26.5	25.5	---	---	21.0	19.5
22	15.0	14.0	21.0	21.0	23.5	21.0	27.5	26.0	---	---	20.5	19.5
23	14.5	13.0	21.5	21.0	21.5	19.0	27.5	26.5	---	---	20.0	19.0
24	13.5	12.5	22.5	21.0	19.5	18.5	27.5	26.5	---	---	19.5	19.0
25	13.5	11.5	23.0	22.0	19.0	17.5	28.0	26.0	---	---	20.0	19.0
26	16.5	13.0	22.5	21.5	19.0	17.5	27.5	26.0	---	---	20.5	19.5
27	14.5	14.0	22.5	21.5	19.5	18.0	27.0	25.0	---	---	20.0	19.0
28	16.5	14.0	22.5	21.5	21.0	19.0	26.0	25.0	---	---	20.0	18.5
29	16.5	16.0	23.0	21.5	21.0	20.5	26.0	25.0	---	---	19.5	18.0
30	18.5	15.5	22.5	21.5	21.0	20.0	26.0	25.5	25.0	21.5	19.0	17.0
31	---	---	22.0	21.0	---	---	26.5	25.0	25.0	23.5	---	---
MONTH	19.0	4.0	23.0	12.0	23.5	17.5	28.0	20.0	---	---	25.5	17.0
YEAR	28.0	0.0										

04194030 MAUMEE RIVER AT CENTER C. AND O. RAILROAD DOCK, AT TOLEDO, OHIO

LOCATION.--Lat 41°41'46", long 83°21'39", Lucas County, at mouth at end of center dock of Chesapeake and Ohio Railroad coal-loading dock, at Toledo.

PERIOD OF RECORD.--Chemical analyses: June 1962 to September 1972

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT.												
06...	--	16	180	0	89	49	1.8	8.1	.37	1.1	372	--
13...	--	--	155	0	75	44	--	--	--	--	--	--
20...	--	--	147	0	79	54	--	--	--	--	--	--
NOV.												
03...	0915	--	144	0	62	40	--	--	--	--	--	13
10...	0915	34	144	0	94	46	1.5	6.8	.38	1.2	320	29
17...	0915	--	134	0	62	39	--	--	--	--	--	26
24...	0915	--	132	0	54	38	--	--	--	--	--	25
DEC.												
01...	0915	--	134	0	58	50	--	--	--	--	--	21
08...	0915	--	168	0	78	60	--	--	--	--	--	26
15...	0940	41	180	0	120	58	8.4	37	.58	1.8	492	58
23...	0915	--	124	0	71	30	--	--	--	--	--	150
29...	0915	--	134	0	77	33	--	--	--	--	--	76
JAN.												
05...	0930	--	156	4	91	40	--	--	--	--	--	61
12...	0930	--	163	0	88	36	--	--	--	--	--	37
19...	0900	26	188	0	110	52	7.8	35	.53	1.6	480	22
FEB.												
02...	0900	33	190	6	120	58	8.6	38	.47	1.4	524	20
16...	0900	--	174	0	80	64	--	--	--	--	--	20
23...	0915	--	182	0	96	57	--	--	--	--	--	--
MAR.												
01...	0900	39	186	0	110	68	6.5	29	.63	1.9	472	19
22...	0915	--	130	0	67	31	--	--	--	--	--	88
29...	0945	--	154	0	74	40	--	--	--	--	--	82
APR.												
05...	0845	18	186	0	100	42	6.7	30	.31	.95	436	39
12...	0845	--	124	0	63	31	--	--	--	--	--	172
19...	0900	-	130	0	60	20	--	--	--	--	--	236
26...	0900	--	114	0	45	14	--	--	--	--	--	314
MAY												
10...	0900	--	188	0	85	32	--	--	--	--	--	74
17...	0900	--	162	4	85	30	--	--	--	--	--	58
24...	0900	21	182	0	87	38	6.1	27	.45	1.4	418	91
31...	0900	--	164	0	72	34	--	--	--	--	--	46
JUNE												
07...	0900	21	226	0	96	42	5.1	22	.39	1.2	436	52
14...	0900	--	168	6	83	38	--	--	--	--	--	29
21...	0925	--	200	0	87	42	--	--	--	--	--	52
28...	0830	--	174	0	82	42	--	--	--	--	--	25
JULY												
05...	0815	24	174	0	86	46	6.7	30	.28	.88	408	27
12...	0935	--	170	0	86	38	--	--	--	--	--	30
19...	0945	--	172	0	76	31	--	--	--	--	--	70
26...	0900	--	130	0	48	24	--	--	--	--	--	19
AUG.												
02...	--	--	136	0	54	30	--	--	--	--	--	31
09...	0920	--	156	0	60	38	--	--	--	--	--	73
16...	0900	--	156	0	56	52	--	--	--	--	--	--
23...	0825	20	162	4	73	33	4.0	18	.28	.86	344	19
SEP.												
06...	0915	24	158	0	66	38	2.2	9.7	.16	.50	330	19
13...	1045	--	128	2	59	40	--	--	--	--	--	184
20...	0915	--	130	0	43	19	--	--	--	--	--	184
27...	0900	--	150	2	63	30	--	--	--	--	--	115

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BERYL-LIUM (BE) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED MOLYB-DENUM (MO) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
14...	1130	10	4	0	4	23	<.5	6.0
JUNE								
07...	1130	--	--	--	--	--	<.5	4.0

04194030 MAUMEE RIVER AT CENTER C. AND O. RAILROAD DOCK, AT TOLEDO, OHIO--Continued

REMARKS.--Determinations of suspended solids and dissolved oxygen (DO) furnished by the city of Toledo, Division of Sewage Disposal. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
OCT.											
06...	230	82	601	7.5	19.5	3.2	34	--	.10	9	8
13...	200	73	530	7.1	15.0	4.2	41	--	--	10	10
20...	200	80	568	7.5	17.0	2.3	24	--	--	5	3
NOV.											
03...	180	62	483	7.5	12.0	3.9	36	3.6	--	5	--
10...	180	62	522	7.3	11.0	4.7	42	3.9	.11	20	--
17...	170	60	484	7.2	5.0	7.3	57	2.2	--	5	--
24...	170	62	444	7.2	11.0	8.0	72	3.5	--	5	--
DEC.											
01...	180	70	517	7.2	5.5	7.6	60	3.9	--	5	--
08...	200	62	603	7.3	6.5	5.0	51	3.6	--	5	--
15...	290	140	747	7.3	6.5	8.5	71	5.9	.18	15	--
23...	210	110	499	7.2	3.5	9.8	74	5.8	--	60	--
29...	230	120	529	7.3	3.5	8.4	63	3.4	--	50	--
JAN.											
05...	270	140	598	8.4	1.5	11.6	83	3.7	--	30	65
12...	270	140	591	7.4	1.0	11.9	84	3.3	--	30	55
19...	300	140	692	7.5	1.0	11.7	82	4.1	.08	30	14
FEB.											
02...	330	160	742	8.3	.5	10.4	72	3.9	.10	20	10
16...	280	140	668	7.2	1.5	10.0	71	3.1	--	10	3
23...	280	130	668	7.3	1.5	--	--	--	--	15	4
MAR.											
01...	280	130	713	7.4	1.5	7.0	50	2.6	.10	15	4
22...	240	130	502	8.1	6.5	10.8	88	3.0	--	35	70
29...	260	130	562	8.3	6.0	9.6	77	3.5	--	25	45
APR.											
05...	290	140	625	8.1	7.0	9.4	77	2.5	.06	30	25
12...	210	110	466	7.8	6.5	10.0	81	2.7	--	35	100
19...	210	100	432	7.3	14.5	6.7	65	.3	--	50	130
26...	160	66	347	7.3	14.5	7.9	77	2.0	--	60	130
MAY											
10...	270	120	572	8.2	14.5	8.0	78	3.4	--	20	40
17...	260	120	549	8.3	17.0	8.0	82	3.4	--	20	40
24...	270	120	589	8.0	21.5	5.9	66	3.2	.08	20	20
31...	230	96	523	7.3	21.0	4.8	53	3.7	--	20	25
JUNE											
07...	310	120	656	7.7	21.5	5.1	57	1.4	.08	15	15
14...	260	110	588	8.3	21.5	5.0	56	3.5	--	15	20
21...	300	140	652	7.5	22.0	4.7	53	3.0	--	15	20
28...	260	120	591	7.6	20.5	5.7	63	1.6	--	15	10
JULY											
05...	270	130	619	7.8	21.5	6.0	67	2.6	.08	20	20
12...	260	120	588	8.2	23.0	3.6	41	.3	--	15	15
19...	240	100	551	7.7	25.0	5.7	68	.4	--	25	45
26...	180	74	409	7.6	26.0	3.4	41	1.0	--	25	40
AUG.											
02...	200	88	450	7.8	25.0	3.2	38	3.2	--	20	20
09...	220	92	508	7.5	22.0	3.8	36	2.2	--	30	50
16...	200	72	461	7.5	21.5	3.8	43	3.0	--	20	15
23...	230	90	510	8.3	23.5	2.5	29	3.0	.00	15	7
SEP.											
06...	210	80	497	8.2	22.0	2.6	30	5.4	.06	15	--
13...	200	92	465	8.3	21.5	2.0	22	4.1	--	10	15
20...	170	64	366	7.3	19.0	6.4	68	4.2	--	60	110
27...	220	94	467	8.3	18.5	5.6	60	2.8	--	40	90

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO

LOCATION.--Lat 41°20'19", long 83°33'10", in NW 1/4 sec.1, T.4 N., R.11 E., Wood County, on downstream side of center pier of bridge on Bloomdale Road, 3.4 miles upstream from South Branch Portage River, 5 miles downstream from Rocky Ford, and 6 miles east northeast of Portage.

DRAINAGE AREA.--217 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1969 to September 1972.
Water temperatures: April 1969 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,350 micromhos Nov. 28; minimum, 169 micromhos July 16.
Water temperatures: Maximum, 33.0°C July 11; minimum, freezing point on many days during November to January, March, and April.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	PH (UNITS)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.							
04...	0840	8.2	0	190	62	.5	.40
14...	1500	--	--	--	--	--	--
26...	0800	7.7	0	240	130	.6	.30
NOV.							
25...	1610	8.0	0	290	170	.7	.20
30...	1325	8.2	0	230	120	.5	1.7
DEC.							
03...	0805	7.4	0	250	140	.5	3.4
30...	1345	8.0	0	90	36	.3	9.5
JAN.							
10...	--	7.3	0	84	30	.2	11
19...	1115	7.7	0	140	51	.2	10
FEB.							
11...	1110	8.7	22	220	83	.3	8.5
18...	0845	8.4	6	100	38	.2	4.6
MAR.							
10...	1145	8.4	7	140	42	.2	10
14...	1540	7.9	0	68	21	.2	13
APR.							
04...	0720	7.9	0	150	41	.2	8.4
22...	1105	8.0	0	61	16	.2	12
MAY							
10...	1050	7.5	0	80	21	.2	15
27...	1925	8.2	0	150	43	.3	6.4
JUNE							
08...	1600	8.5	6	140	37	.3	11
30...	0935	8.1	0	66	21	.2	17
JULY							
06...	1445	8.4	8	130	38	.2	9.2
19...	0740	8.1	0	63	15	.2	5.3
AUG.							
12...	0955	8.3	3	120	33	.3	1.9
16...	1650	7.5	0	53	13	.2	3.0
SEP.							
13...	1655	8.6	10	230	67	.5	.50
30...	0910	7.7	0	59	14	.2	3.4

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1970-72): Maximum, 1,480 micromhos Sept. 6, 1971; minimum, 169 micromhos July 16, 1972.
Water temperatures (1971-72): Maximum, 33.0°C July 11, 1972; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since April 1969. Maximum recorded specific conductance value of 1,810 micromhos occurred Sept. 4, 1969. Maximum recorded water temperature of 36.5°C occurred June 28, 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
04...	1.8	544	340	200	830	--	--
14...	--	--	--	--	--	.6	14
26...	1.2	796	440	220	1220	--	--
NOV.							
25...	1.0	936	510	250	1410	--	--
30...	7.3	730	410	220	1130	--	--
DEC.							
03...	15	842	490	260	1290	--	--
30...	42	356	250	130	566	--	--
JAN.							
10...	50	390	270	150	556	--	--
19...	46	574	390	200	816	--	--
FEB.							
11...	38	808	530	280	1110	--	--
18...	20	428	280	140	611	--	--
MAR.							
10...	46	508	380	200	793	--	--
14...	59	318	220	130	477	--	--
APR.							
04...	37	498	360	190	753	--	--
22...	51	304	200	100	426	--	--
MAY							
10...	67	370	260	140	553	--	--
27...	28	488	350	180	754	--	--
JUNE							
08...	48	480	360	190	754	<.5	4.0
30...	75	370	240	130	522	--	--
JULY							
06...	41	466	360	170	754	--	--
19...	23	306	250	91	502	--	--
AUG.							
12...	8.4	460	380	150	742	--	--
16...	13	244	210	70	417	--	--
SEP.							
13...	2.1	610	420	230	932	--	--
30...	15	272	220	78	450	--	--

STREAMS TRIBUTARY TO LAKE ERIE

04193410 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	799	773	1320	1220	1140	1110	610	536	890	864	---	---
2	806	782	1230	1150	1130	1070	643	610	867	838	---	---
3	815	798	1160	1150	1130	1080	643	627	903	807	---	---
4	827	809	1160	1070	1150	1130	648	631	921	552	---	---
5	871	825	1120	1080	1220	1150	680	646	616	541	---	---
6	861	849	1140	1110	1250	1210	714	678	---	---	---	---
7	870	857	1160	1130	1240	1170	754	714	---	---	---	---
8	891	862	1200	1150	1160	968	765	750	---	---	---	---
9	894	878	1210	1190	978	661	774	765	---	---	---	---
10	1010	887	1210	1140	661	585	769	580	---	---	765	726
11	1090	985	1140	1100	674	631	580	520	---	---	774	731
12	1090	1030	1120	1100	719	674	580	531	---	---	770	741
13	1040	1010	1120	1100	730	699	618	580	---	---	739	476
14	1030	1010	1120	841	743	706	642	618	---	---	480	464
15	1010	983	---	---	760	743	688	635	---	---	526	480
16	985	942	---	---	763	745	882	680	---	---	52[illegible]	504
17	960	947	---	---	783	649	882	866	---	---	544	512
18	1020	957	---	---	719	649	866	787	---	---	594	544
19	1060	1020	---	---	649	616	787	710	---	---	631	592
20	1100	1060	---	---	676	641	707	678	---	---	664	631
21	1120	1100	---	---	721	676	678	656	---	---	689	647
22	1130	1110	1180	844	778	716	661	619	---	---	700	660
23	1160	1130	1190	1180	794	776	619	603	---	---	686	660
24	1140	1110	[illegible]	1170	804	782	665	610	---	---	706	677
25	1190	1120	[illegible]	1210	802	798	669	641	---	---	733	[illegible]
26	1220	1190	1290	1230	812	800	701	667	---	---	735	[illegible]
27	1220	1190	1340	1290	820	802	737	701	---	---	744	724
28	1230	1200	1350	1340	824	802	765	737	---	---	746	729
29	1240	1200	1340	1190	822	804	805	765	---	---	746	720
30	1320	1220	1190	1100	824	444	867	805	---	---	761	737
31	1280	1230	---	---	531	457	900	796	---	---	761	746
MONTH	1320	773	---	---	1250	444	900	520	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	780	748	685	664	713	681	674	581	700	662	763	703
2	767	748	676	631	731	713	705	672	726	680	776	724
3	763	735	672	643	724	689	722	703	751	715	850	776
4	789	682	697	670	729	689	735	716	724	657	863	832
5	761	715	711	695	742	722	750	731	707	667	888	863
6	722	706	743	703	748	729	763	737	694	667	872	854
7	724	704	748	728	763	731	752	711	---	---	857	844
8	739	680	752	741	763	731	711	685	---	---	869	833
9	720	682	661	558	748	718	705	650	---	---	910	869
10	715	686	567	480	724	705	703	652	---	---	943	905
11	698	678	634	567	742	692	701	667	---	---	974	939
12	709	687	658	634	735	713	687	661	---	---	1060	974
13	744	693	669	658	733	652	690	667	---	---	1060	507
14	722	702	685	639	735	696	707	654	---	---	507	258
15	720	702	639	589	731	696	707	189	---	---	312	250
16	726	598	632	594	742	713	252	169	---	---	416	312
17	617	584	663	630	755	718	330	252	---	---	482	416
18	664	617	679	659	737	701	475	330	---	---	503	386
19	682	662	692	674	739	681	525	475	---	---	453	387
20	675	533	701	681	713	678	589	525	---	---	518	453
21	557	512	707	687	713	659	643	589	---	---	580	518
22	567	380	709	681	713	694	665	643	---	---	616	578
23	508	395	707	681	718	711	669	641	---	---	639	616
24	591	508	716	692	748	718	649	484	---	---	665	639
25	650	591	739	696	765	746	579	456	---	---	685	665
26	690	650	746	709	755	703	586	505	---	---	689	603
27	700	683	750	737	713	690	657	611	---	---	589	484
28	707	693	757	744	718	676	722	657	---	---	510	470
29	707	696	767	746	676	400	753	718	---	---	561	505
30	709	687	763	705	600	496	778	732	686	671	534	428
31	---	---	713	679	---	---	746	659	722	664	---	---
MONTH	789	380	767	480	765	400	778	169	---	---	1060	250
YEAR	1350	169										

04194310 MIDDLE BRANCH PORTAGE RIVER NEAR PORTAGE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	28.0	20.5	17.5	12.0	2.0	1.0	3.0	1.5	1.0	1.0	---	---
2	27.5	20.0	17.5	13.0	2.0	0.0	4.0	2.5	1.0	0.5	---	---
3	25.5	20.5	14.0	9.0	2.0	0.0	3.0	1.5	1.0	0.5	---	---
4	24.5	20.0	10.5	6.0	1.5	0.0	3.0	1.5	1.0	0.5	---	---
5	23.5	16.5	11.0	5.5	1.5	0.0	1.5	0.0	1.0	0.5	---	---
6	19.5	15.0	8.0	4.0	2.5	0.0	0.5	0.0	---	---	---	---
7	17.5	11.5	4.5	1.0	1.5	0.5	0.0	0.0	---	---	---	---
8	15.5	10.5	6.0	1.0	3.0	1.0	0.0	0.0	---	---	---	---
9	16.0	13.0	4.5	3.0	5.5	2.5	0.5	0.0	---	---	---	---
10	15.5	12.0	8.0	3.0	6.5	5.5	0.5	0.0	---	---	0.5	0.0
11	16.0	10.5	8.0	3.0	7.0	6.0	2.5	0.0	---	---	5.0	0.0
12	16.5	10.0	9.0	4.5	11.0	7.0	2.5	2.0	---	---	6.0	4.5
13	16.0	11.0	10.5	5.0	10.5	5.5	3.0	1.0	---	---	5.0	2.5
14	18.0	12.5	11.0	5.5	5.5	3.5	3.0	0.5	---	---	3.0	2.0
15	20.5	12.0	11.0	9.5	4.0	2.0	0.5	0.0	---	---	3.5	1.5
16	21.5	15.0	11.0	7.5	2.0	0.5	7.0	0.0	---	---	4.0	3.0
17	21.5	16.5	11.0	8.0	6.0	2.0	0.0	0.0	---	---	4.0	3.5
18	22.5	16.0	---	---	4.0	2.5	0.0	0.0	---	---	4.0	3.0
19	22.5	15.0	---	---	5.0	1.0	0.0	0.0	---	---	6.5	1.5
20	22.5	14.0	---	---	1.0	0.0	1.0	0.5	---	---	7.5	3.5
21	21.5	15.5	11.0	5.5	1.0	0.0	1.0	0.5	---	---	11.0	6.0
22	19.0	17.5	6.5	4.5	2.0	0.0	1.5	1.0	---	---	10.0	4.0
23	18.5	17.5	4.5	1.0	1.5	0.0	2.0	1.0	---	---	3.5	2.0
24	18.0	16.5	4.0	0.0	4.5	1.5	4.0	0.5	---	---	6.0	0.0
25	17.0	16.0	4.0	2.0	4.5	1.0	3.5	0.5	---	---	7.0	1.5
26	18.5	15.0	4.0	2.0	6.5	4.5	1.0	1.0	---	---	9.0	3.0
27	19.5	14.0	3.5	1.5	9.0	5.5	1.0	1.0	---	---	10.0	5.5
28	20.5	14.0	4.5	2.0	7.5	0.0	1.0	1.0	---	---	8.5	5.0
29	20.5	13.0	3.5	2.0	1.5	0.0	1.0	1.0	---	---	6.5	4.0
30	22.0	13.0	2.5	0.5	5.5	1.0	1.0	1.0	---	---	6.0	2.5
31	19.0	13.5	---	---	4.5	3.0	1.5	1.0	---	---	9.0	2.5
MONTH	28.0	10.0	17.5	0.0	11.0	0.0	7.0	0.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.0	19.5	15.5	17.5	13.0	24.5	18.5	27.0	23.5	30.5	23.5
2	6.5	3.5	18.5	15.5	23.0	16.0	24.0	21.0	26.5	23.5	26.5	20.5
3	9.5	3.5	17.5	13.0	22.0	19.0	23.5	20.0	26.5	23.5	22.5	18.5
4	10.0	6.0	15.0	12.5	25.5	19.5	23.5	19.5	25.5	20.5	25.0	17.0
5	10.5	5.5	19.5	11.0	26.0	19.0	23.5	17.5	26.5	19.0	26.0	18.0
6	13.0	7.5	22.5	15.5	25.0	21.5	24.0	17.0	23.5	20.5	26.5	18.0
7	8.5	0.0	19.5	13.0	26.5	19.0	23.5	18.0	---	---	25.5	18.5
8	4.5	0.0	13.0	9.5	27.0	20.0	26.5	18.5	---	---	23.0	21.0
9	8.5	0.5	12.5	9.0	25.0	21.0	25.5	21.5	---	---	24.0	17.5
10	11.0	5.5	14.5	10.5	23.5	16.0	29.5	22.0	---	---	25.0	16.0
11	13.5	9.0	18.0	11.5	24.5	15.5	33.0	24.5	---	---	25.0	19.5
12	15.0	10.0	20.5	13.5	22.5	18.0	32.5	26.0	---	---	24.0	22.0
13	20.0	12.5	18.0	14.5	24.5	20.5	29.5	25.0	---	---	26.5	21.5
14	16.0	12.0	18.5	14.5	28.0	21.5	30.0	23.5	---	---	23.0	19.5
15	17.5	11.5	17.0	14.0	26.0	23.5	26.5	22.0	---	---	19.5	17.5
16	15.5	10.5	16.5	14.0	25.0	20.5	24.5	22.0	---	---	19.0	18.0
17	13.5	9.0	21.0	14.0	23.0	18.0	25.0	23.5	---	---	22.5	18.5
18	16.5	11.0	24.0	16.0	27.0	18.0	24.5	22.5	---	---	22.0	20.0
19	16.5	13.0	24.0	18.5	29.0	21.5	24.5	22.5	---	---	20.0	19.0
20	15.0	10.0	24.0	18.5	28.0	24.0	27.0	23.0	---	---	20.0	17.0
21	10.0	8.0	26.0	18.5	25.5	18.0	29.5	24.5	---	---	19.5	16.5
22	10.0	9.0	25.5	20.0	18.0	14.5	30.5	25.5	---	---	18.5	15.0
23	11.5	9.0	27.0	19.0	14.5	12.5	31.0	25.5	---	---	17.0	13.5
24	11.0	8.5	28.0	21.0	15.5	13.5	29.0	22.5	---	---	19.0	15.0
25	12.0	7.0	26.5	20.5	23.5	14.5	25.0	22.0	---	---	20.5	18.0
26	14.5	8.0	26.0	18.0	24.0	19.5	23.5	21.5	---	---	21.0	19.5
27	15.5	9.5	26.5	18.5	28.5	19.5	22.0	20.0	---	---	20.0	16.5
28	17.0	10.0	26.0	19.0	26.5	22.0	25.0	18.5	---	---	16.5	15.5
29	14.5	12.0	27.0	20.0	24.5	19.0	26.5	20.0	---	---	17.0	16.0
30	18.5	12.0	23.5	20.0	20.5	18.0	27.5	20.0	29.5	26.0	16.0	14.5
31	---	---	20.0	14.5	---	---	30.0	22.0	30.0	22.0	---	---
MONTH	20.0	0.0	28.0	9.0	29.0	12.5	33.0	17.0	---	---	30.5	13.5
YEAR	33.0	0.0										

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO

LOCATION.--Lat 41°26'58", long 83°21'29", in E 1/2 sec.28, T.6 N., R.13 E., Sandusky County, on right bank at old interurban line bridge abutment, just downstream from railroad bridge, and 800 ft downstream from gaging station at Woodville.

DRAINAGE AREA.--428 sq mi (at gaging station).

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1972.
Water temperatures: June 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,350 micromhos July 8; minimum, 286 micromhos Aug. 15.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
02...	1200	28	198	0	160	83	.4	3.2
14...	1205	20	114	0	240	140	.4	2.0
14...	1230	--	--	--	--	--	--	--
NOV.								
08...	1600	15	218	0	180	110	.5	2.0
20...	1300	12	132	0	270	180	.6	2.2
DEC.								
02...	1600	42	170	6	220	130	.5	3.3
30...	1600	646	168	0	96	45	.4	9.0
JAN.								
08...	1600	170	232	12	140	57	.3	11
12...	2000	510	180	0	120	44	.2	11
FEB.								
11...	2015	66	250	0	220	140	.3	4.6
18...	1600	160	168	0	110	52	.2	4.2
MAR.								
01...	1900	70	170	0	210	120	.3	3.2
18...	1600	--	145	0	86	29	.2	13
APR.								
01...	1830	134	219	0	160	64	.2	8.8
22...	1600	3050	144	0	77	25	.2	12
MAY								
10...	0830	1890	152	0	84	26	.2	14
27...	1700	63	197	0	180	81	.2	4.4
JUNE								
07...	1205	--	--	--	--	--	--	--
13...	1305	54	202	0	170	84	.3	5.0
21...	2600	160	185	0	100	48	.3	11
JULY								
19...	1310	1210	184	0	72	17	.2	4.7
29...	1606	78	214	12	150	62	.3	3.0
AUG.								
02...	1400	35	238	0	150	63	.3	1.8
18...	1640	208	208	0	88	30	.2	2.4
SEP.								
09...	1606	16	206	0	190	110	.5	1.2
16...	0949	2410	130	0	48	14	.2	3.0

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO

EXTREMES.--Period of record:
Specific conductance (1970-72): Maximum, 2,350 micromhos Feb. 4, 1971; minimum, 251 micromhos Feb. 21, 1971.
Water temperatures (1970-71): Maximum, 33.0°C June 28, 1971; minimum, freezing point on many days during November 1970 to March 1971.

REMARKS.--Continuous water-quality recorder operated since June 1968. Dissolved oxygen concentrations of 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Maximum recorded water temperature of 35.0°C occurred Aug. 4, 1969. Tabular data omitted for those periods when no data were recorded. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Portage River at Woodville, Ohio (station 04195500).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
02...	14	572	340	180	877	--	--
14...	9.0	714	430	340	1080	--	--
14...	--	--	--	--	--	<.5	3.0
NOV.							
08...	8.6	646	360	180	1020	--	--
20...	9.9	858	460	350	1230	--	--
DEC.							
02...	15	774	440	290	1120	--	--
30...	40	414	290	150	631	--	--
JAN.							
08...	47	578	410	200	872	--	--
12...	49	462	330	180	686	--	--
FEB.							
11...	20	854	510	300	1170	--	--
18...	19	466	290	150	675	--	--
MAR.							
01...	14	688	440	300	1040	--	--
18...	58	366	270	150	588	--	--
APR.							
01...	39	574	410	230	881	--	--
22...	51	354	250	130	530	--	--
MAY							
10...	63	392	270	140	567	--	--
27...	20	600	400	240	900	--	--
JUNE							
07...	--	--	--	--	--	<.5	6.0
13...	22	602	400	230	921	--	--
21...	47	456	310	160	697	--	--
JULY							
19...	21	340	240	89	498	--	--
29...	13	580	400	200	837	--	--
AUG.							
02...	7.7	556	400	200	828	--	--
18...	11	388	290	120	596	--	--
SEP.							
09...	5.1	662	380	210	1020	--	--
16...	14	252	190	84	367	--	--

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1030	786	---	---	1140	995	670	574	---	---	1160	759
2	1130	894	---	---	1170	1040	720	669	---	---	759	582
3	1060	933	---	---	1240	1100	749	719	---	---	654	591
4	1030	885	1260	1190	1240	1110	783	738	---	---	684	573
5	1130	897	1210	1100	1210	1120	841	736	---	---	756	684
6	1130	810	1230	1140	1200	929	904	802	---	---	801	720
7	1130	861	1170	1020	1010	827	899	845	---	---	849	783
8	1150	894	1020	982	842	737	914	827	---	---	861	795
9	1140	892	994	961	794	716	917	749	---	---	864	795
10	1050	902	1120	967	642	794	751	613	---	---	936	816
11	1070	832	1040	976	872	812	640	601	---	---	894	834
12	1190	851	1110	1020	869	827	699	636	---	---	900	879
13	1060	834	1150	952	920	839	723	663	---	---	1030	660
14	1080	815	1180	1030	1030	842	771	723	---	---	702	576
15	1110	909	1170	1050	830	713	780	774	---	---	597	474
16	1200	952	1210	1030	710	662	786	780	---	---	579	531
17	1170	1030	1280	1090	750	702	795	786	---	---	594	537
18	1180	1020	1270	1100	816	750	813	792	---	---	630	570
19	1160	1020	1310	1060	848	810	822	729	---	---	678	636
20	1250	1010	1330	1210	888	840	---	---	---	---	714	657
21	1130	990	1270	1150	920	874	---	---	---	---	750	663
22	1100	957	1180	1050	934	850	759	738	---	---	765	735
23	1030	981	1080	1050	1010	881	741	717	---	---	777	729
24	1080	990	1100	1030	1040	898	768	687	---	---	774	714
25	---	---	1150	1050	1010	920	753	690	---	---	786	753
26	---	---	1130	1040	1010	934	762	753	---	---	843	762
27	---	---	1290	1030	1060	912	771	762	---	---	810	744
28	---	---	1170	1020	1050	937	783	771	---	---	840	711
29	---	---	1200	1000	1060	903	789	783	---	---	894	798
30	---	---	1340	1060	1090	556	801	570	---	---	882	822
31	---	---	---	---	582	546	---	---	---	---	903	831
MONTH	---	---	1340	952	1240	546	917	570	---	---	1160	474

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	912	831	843	777	812	704	660	552	930	693	858	750
2	894	828	837	717	826	739	729	654	877	766	953	731
3	948	819	766	691	839	782	765	687	---	---	1000	817
4	996	816	770	719	782	715	813	741	---	---	984	759
5	900	813	820	745	801	744	828	741	---	---	1050	840
6	867	786	857	806	859	775	971	774	---	---	957	813
7	858	786	837	774	798	672	1120	890	654	576	936	840
8	864	828	835	733	832	716	1350	818	635	605	930	828
9	843	792	821	566	887	722	1060	981	698	653	1130	927
10	846	813	606	558	945	807	971	842	781	727	1080	921
11	834	774	683	606	922	748	968	815	849	751	1050	933
12	894	762	716	683	968	809	1030	809	909	846	1010	930
13	819	744	769	716	918	817	---	---	923	815	996	822
14	816	771	783	681	858	759	---	---	953	773	918	339
15	813	633	689	638	798	699	---	---	1010	286	342	291
16	720	582	647	581	801	741	---	---	477	318	438	321
17	624	591	634	610	873	816	---	---	543	477	516	438
18	666	606	822	634	894	765	---	---	641	543	558	507
19	705	657	746	692	786	705	---	---	672	501	567	435
20	711	687	783	726	846	717	605	542	600	504	513	453
21	690	570	798	495	867	663	651	597	661	600	1160	543
22	615	513	796	499	804	678	701	626	719	656	690	639
23	543	519	844	748	930	798	726	701	765	711	765	708
24	546	534	860	761	954	900	763	706	807	744	816	708
25	684	570	968	776	945	870	764	587	862	766	837	735
26	732	684	1030	792	933	807	642	588	839	800	873	675
27	759	720	1090	813	972	786	721	619	875	737	765	561
28	801	750	1090	848	993	813	761	713	891	735	600	585
29	840	792	1100	726	930	615	855	777	790	730	603	534
30	852	789	1020	794	714	579	868	799	815	743	606	561
31	---	---	1120	819	---	---	911	764	902	740	---	---
MONTH	996	513	1120	495	993	579	---	---	1010	286	1160	291
YEAR	1350	286										

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

pH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.8	7.1	8.0	7.3	---	---	---	---	10.0	7.8
2	---	---	7.6	7.0	8.1	7.4	---	---	---	---	8.7	7.0
3	10.1	8.5	7.5	7.2	7.7	7.4	---	---	---	---	---	---
4	10.3	8.6	7.6	7.3	8.1	7.4	---	---	---	---	---	---
5	9.6	8.6	8.7	7.2	8.2	7.3	---	---	---	---	8.8	8.2
6	9.9	8.8	7.8	7.2	8.2	7.3	---	---	---	---	8.8	8.4
7	8.9	8.2	7.5	7.2	8.7	7.5	---	---	8.6	8.0	8.7	8.5
8	10.1	8.7	7.6	7.2	8.9	7.9	---	---	8.5	8.3	8.6	8.4
9	10.3	9.1	7.4	7.2	8.7	7.9	---	---	8.7	8.5	8.8	8.5
10	10.6	9.0	8.1	7.1	9.0	7.6	---	---	8.9	8.7	8.8	8.6
11	10.5	9.0	8.3	7.2	9.6	8.3	---	---	9.1	8.7	8.7	8.3
12	9.6	8.6	8.4	7.0	9.4	8.2	---	---	9.2	8.8	8.3	7.4
13	7.2	6.3	7.6	7.2	9.0	7.3	---	---	9.4	8.7	8.1	7.6
14	7.0	6.4	7.4	7.2	8.7	6.7	---	---	12.0	8.7	8.4	7.2
15	7.8	6.7	7.4	7.0	7.6	6.7	---	---	12.0	8.2	7.4	7.1
16	7.6	7.3	7.4	7.2	8.2	6.5	---	---	8.9	7.7	7.4	7.1
17	7.5	6.8	7.4	7.0	8.2	7.2	---	---	8.4	7.8	7.4	7.1
18	7.4	6.9	8.4	6.9	8.1	6.6	---	---	9.6	7.9	7.1	7.0
19	7.7	7.2	7.9	7.5	8.4	6.3	---	---	8.0	7.6	---	---
20	7.7	7.1	8.1	7.6	8.3	6.1	---	---	---	---	---	---
21	7.7	7.0	8.9	7.5	8.0	6.7	---	---	---	---	---	---
22	7.8	6.7	8.9	7.4	---	---	---	---	---	---	---	---
23	7.3	6.8	9.1	7.5	---	---	---	---	---	---	---	---
24	7.5	6.8	9.2	7.4	---	---	---	---	---	---	---	---
25	7.5	7.0	9.1	7.6	---	---	---	---	[illegible].9	6.9	---	---
26	7.7	7.0	9.1	7.9	---	---	---	---	9.2	7.9	---	---
27	7.8	7.2	9.1	8.2	---	---	---	---	9.5	8.7	---	---
28	8.2	7.2	9.7	8.0	---	---	---	---	9.9	8.8	---	---
29	7.8	7.2	9.3	8.2	---	---	---	---	9.9	9.1	---	---
30	7.9	7.4	8.1	7.4	---	---	---	---	10.0	9.4	---	---
31	---	---	7.7	6.1	---	---	---	---	10.0	9.5	---	---
MONTH	10.6	6.3	9.7	6.1	---	---	---	---	---	---	---	---

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.2	5.5	---	---	13.6	12.0	11.5	7.7	---	---	14.6	12.2
2	11.0	6.3	---	---	14.5	12.4	11.6	9.7	---	---	12.5	8.5
3	12.3	6.6	---	---	14.5	12.4	10.1	8.7	---	---	12.3	10.6
4	13.4	7.1	12.7	10.7	14.7	12.8	10.3	4.3	---	---	12.2	10.2
5	13.2	8.1	12.8	10.5	14.2	12.6	9.9	8.2	---	---	13.3	11.1
6	12.0	8.2	11.3	10.2	12.9	11.9	9.7	8.0	---	---	12.4	10.7
7	12.5	7.7	13.5	10.3	12.0	10.5	9.0	8.0	---	---	13.4	11.4
8	11.8	8.8	14.7	12.2	11.1	10.7	9.1	7.4	---	---	12.0	11.3
9	10.1	8.3	14.2	12.8	11.3	10.7	8.5	7.6	---	---	12.6	11.6
10	10.1	7.2	15.0	12.0	11.4	11.0	9.5	7.3	---	---	12.4	11.4
11	11.3	7.4	15.0	12.4	11.1	10.7	8.5	7.3	---	---	13.1	11.6
12	12.2	7.9	15.0	12.5	11.7	11.0	8.6	7.0	---	---	12.0	10.6
13	13.3	8.6	13.7	12.2	12.6	11.7	9.1	6.9	---	---	11.7	9.4
14	12.6	8.8	14.1	12.0	12.5	12.1	8.9	5.4	---	---	11.9	11.0
15	14.1	8.8	14.3	11.2	12.0	6.6	6.1	5.2	---	---	11.9	11.4
16	13.2	8.5	14.3	10.4	9.7	6.2	6.5	5.4	---	---	12.2	10.7
17	11.2	8.0	14.7	10.8	9.8	8.9	6.2	4.5	---	---	11.5	10.9
18	12.6	8.0	14.1	10.5	10.8	9.8	5.2	3.3	---	---	12.9	11.2
19	13.0	8.1	12.5	9.5	10.9	10.6	4.4	3.3	---	---	13.7	12.5
20	13.4	7.9	13.1	10.8	10.8	10.3	4.9	4.3	---	---	13.5	12.2
21	14.5	7.3	13.5	11.3	12.0	10.1	5.3	4.6	---	---	13.0	11.5
22	10.8	6.8	14.4	12.5	12.6	11.6	11.8	5.2	---	---	13.6	12.5
23	7.5	5.8	14.9	13.5	12.7	12.1	9.1	7.8	---	---	14.2	13.9
24	8.2	5.7	14.3	12.3	12.5	12.0	9.5	8.2	---	---	14.6	13.9
25	---	---	13.9	12.5	13.0	12.1	9.6	8.4	---	---	14.4	13.6
26	---	---	14.1	12.1	12.5	11.6	8.5	4.5	---	---	14.6	13.1
27	---	---	12.7	11.9	12.7	11.5	5.1	4.5	---	---	14.1	13.8
28	---	---	13.9	11.8	13.4	11.8	5.1	4.3	---	---	14.1	12.6
29	---	---	13.3	11.7	14.4	12.8	5.5	4.5	---	---	14.2	12.7
30	---	---	13.2	10.2	13.7	9.5	5.9	4.9	---	---	14.7	13.8
31	---	---	---	---	10.7	7.6	---	---	---	---	14.5	13.6
MONTH	---	---	15.0	9.5	14.7	6.2	11.8	3.3	---	---	14.7	8.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.1	---	---	---	---	5.8	5.3	---	---	9.7	5.7
2	15.0	13.2	---	---	---	---	6.8	6.0	---	---	10.6	9.3
3	15.0	13.8	---	---	---	---	8.3	6.8	---	---	10.7	9.6
4	---	---	---	---	---	---	9.5	7.9	---	---	10.8	9.2
5	---	---	---	---	---	---	11.2	8.7	---	---	10.8	8.9
6	---	---	---	---	---	---	10.2	7.9	---	---	10.5	8.5
7	---	---	---	---	---	---	10.6	5.9	6.3	4.2	10.1	8.1
8	---	---	---	---	---	---	11.1	5.5	4.3	3.6	9.2	8.5
9	---	---	---	---	---	---	8.9	5.6	5.7	4.1	10.1	8.5
10	---	---	---	---	---	---	7.9	4.9	6.3	5.1	9.9	8.1
11	---	---	---	---	---	---	7.8	4.0	6.4	5.0	9.3	7.7
12	---	---	---	---	---	---	6.3	3.2	7.4	4.7	8.2	7.6
13	---	---	---	---	11.1	6.8	6.2	2.7	9.1	4.9	10.5	7.7
14	---	---	---	---	9.7	5.6	5.7	2.2	10.9	4.4	9.5	6.3
15	---	---	---	---	7.2	5.4	3.7	2.2	11.0	4.3	6.8	6.5
16	---	---	---	---	6.3	4.8	---	---	5.2	4.6	7.5	6.3
17	---	---	---	---	7.2	4.9	---	---	5.4	4.6	8.5	7.5
18	---	---	---	---	6.4	4.6	---	---	5.1	4.5	8.1	7.5
19	---	---	---	---	7.0	4.5	4.1	3.7	5.3	4.7	8.0	5.3
20	---	---	---	---	9.2	4.5	4.4	3.8	5.0	3.7	7.0	4.8
21	---	---	---	---	5.8	4.6	4.2	3.6	4.2	3.7	8.8	6.0
22	---	---	---	---	6.1	5.3	3.8	3.4	4.9	3.7	8.4	7.9
23	---	---	---	---	7.9	6.2	---	---	6.4	4.4	9.0	8.3
24	---	---	---	---	7.8	6.7	---	---	7.8	4.8	9.1	8.5
25	---	---	---	---	8.9	6.9	---	---	10.6	6.0	9.4	8.3
26	---	---	---	---	10.0	6.9	---	---	13.7	6.3	9.1	7.4
27	---	---	---	---	11.1	6.9	---	---	14.0	7.3	8.5	6.4
28	---	---	---	---	12.4	7.0	---	---	15.0	7.2	8.6	7.3
29	---	---	---	---	10.0	6.1	---	---	15.0	6.1	9.9	7.5
30	---	---	---	---	6.4	5.0	---	---	15.0	6.0	11.0	9.5
31	---	---	---	---	---	---	---	---	13.7	5.8	---	---
MONTH	---	---	---	---	---	---	---	---	15.0	3.6	11.0	4.8

04195600 PORTAGE RIVER AT RAILROAD BRIDGE, AT WOODVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	4.0	4.0	6.0	5.5	---	---	7.0	4.0
2	---	---	---	---	4.0	4.0	6.0	5.5	---	---	7.5	2.0
3	---	---	---	---	4.0	4.0	6.5	6.0	---	---	---	---
4	---	---	9.5	9.0	4.0	4.0	7.5	6.0	---	---	---	---
5	---	---	9.0	9.0	4.0	4.0	7.5	7.0	---	---	4.5	0.0
6	---	---	9.0	9.0	4.5	4.0	7.5	7.0	---	---	5.0	0.0
7	---	---	---	---	4.0	4.0	7.5	7.0	---	---	5.0	0.5
8	---	---	---	---	4.5	4.0	7.5	7.5	---	---	1.5	0.0
9	---	---	---	---	4.5	4.5	8.5	7.5	---	---	1.0	0.0
10	---	---	---	---	4.5	4.5	9.0	7.5	---	---	4.5	0.0
11	---	---	---	---	4.5	4.5	10.0	8.5	---	---	5.0	4.0
12	---	---	---	---	4.5	4.0	9.5	9.0	---	---	5.0	2.5
13	---	---	---	---	4.0	4.0	9.5	8.5	---	---	5.0	2.5
14	---	---	---	---	4.0	4.0	9.5	8.0	---	---	---	---
15	---	---	---	---	4.5	4.5	9.5	9.0	---	---	---	---
16	---	---	---	---	4.5	4.5	9.5	9.0	---	---	---	---
17	---	---	---	---	4.5	4.0	10.5	9.0	---	---	---	---
18	---	---	---	---	4.0	4.0	12.5	10.5	---	---	7.0	4.5
19	---	---	---	---	4.0	3.5	13.0	11.5	---	---	7.5	7.0
20	---	---	---	---	4.0	4.0	11.5	11.0	---	---	---	---
21	---	---	---	---	4.0	4.0	11.5	11.0	---	---	8.0	6.0
22	---	---	---	---	4.0	4.0	11.0	7.0	---	---	---	---
23	---	---	---	---	4.0	4.0	7.5	7.0	---	---	---	---
24	---	---	1.0	1.0	4.0	4.0	7.5	7.0	---	---	---	---
25	---	---	1.0	1.0	4.0	4.0	8.5	7.0	---	---	8.0	6.0
26	---	---	1.0	1.0	4.5	4.0	10.5	8.5	---	---	---	---
27	---	---	1.5	1.0	4.5	4.0	10.5	10.0	---	---	10.0	9.0
28	---	---	1.5	1.0	4.5	4.0	10.5	10.0	---	---	9.0	6.5
29	---	---	1.5	1.0	4.0	4.0	10.5	9.5	---	---	11.0	8.5
30	---	---	4.0	1.0	4.0	4.0	10.0	9.5	---	---	13.0	8.0
31	---	---	---	---	6.0	4.0	---	---	---	---	9.5	6.0
MONTH	---	---	---	---	6.0	3.5	13.0	5.5	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	4.5	18.5	15.0	16.0	15.0	33.5	20.5	27.0	22.5	30.5	24.0
2	6.0	3.5	19.0	16.5	19.5	16.0	24.5	22.5	24.5	22.5	27.0	21.5
3	9.0	3.0	17.5	15.5	21.0	18.5	23.0	20.0	---	---	23.5	20.5
4	10.0	6.5	16.0	14.0	24.0	20.0	23.0	19.5	---	---	24.0	18.0
5	10.5	7.0	17.5	12.5	24.5	21.5	23.0	18.0	---	---	24.0	18.0
6	11.5	8.5	22.0	16.5	25.0	22.5	25.0	17.0	---	---	25.5	18.0
7	9.5	4.5	19.5	16.0	24.5	21.5	25.0	18.0	21.5	19.5	26.0	18.5
8	5.0	2.0	15.5	12.5	25.0	20.5	26.5	18.5	19.5	18.5	23.5	21.5
9	7.0	3.0	14.0	11.5	23.5	21.0	26.0	21.0	21.5	19.0	23.0	18.0
10	9.5	6.0	14.0	13.0	22.5	18.0	29.0	22.0	23.5	18.0	24.0	16.5
11	11.5	9.0	16.5	13.5	22.0	17.0	32.5	24.0	23.0	19.0	24.5	19.5
12	13.5	11.0	19.0	16.0	21.0	18.5	32.5	26.0	25.5	21.0	24.5	23.0
13	16.5	12.5	17.5	17.0	25.5	20.0	30.0	25.0	27.5	21.5	26.0	21.0
14	15.5	13.5	18.0	17.0	27.5	22.5	30.5	24.0	28.5	23.5	23.0	19.5
15	13.0	10.0	17.0	11.5	26.0	23.5	27.0	23.0	24.0	21.5	19.5	18.0
16	12.0	10.5	16.5	11.0	24.0	21.0	---	---	22.5	20.0	19.5	18.0
17	12.0	10.5	18.5	15.0	22.5	18.5	---	---	24.5	22.0	22.0	19.0
18	14.0	12.0	21.0	17.0	25.5	17.5	---	---	25.5	23.5	22.0	20.5
19	15.0	10.5	22.5	19.0	28.5	20.0	27.5	24.0	24.5	22.5	23.5	19.5
20	14.5	11.5	22.5	20.0	27.5	22.5	30.0	24.0	24.5	21.0	31.5	22.5
21	11.0	10.0	23.0	19.5	24.5	17.5	30.0	25.5	26.0	21.5	27.0	18.0
22	21.5	10.0	23.5	20.0	17.5	13.5	32.0	27.0	25.0	23.0	18.0	16.0
23	27.0	23.0	25.0	20.0	15.0	12.0	31.0	27.0	26.0	23.0	16.0	15.0
24	26.5	22.0	24.5	20.5	15.5	14.0	29.0	26.0	26.0	23.0	19.5	15.5
25	18.0	11.0	24.5	19.0	20.5	14.0	28.5	24.0	26.5	22.5	20.5	18.5
26	18.5	13.5	24.0	18.5	22.5	18.0	31.0	22.0	26.0	22.5	22.0	19.5
27	18.0	13.5	23.5	18.5	26.5	18.0	22.0	20.5	24.5	22.0	25.5	19.5
28	18.0	13.5	24.0	16.5	26.0	20.0	23.5	18.5	26.0	20.5	27.0	21.0
29	19.0	13.5	21.5	19.0	22.5	18.5	25.0	20.0	27.5	22.0	27.5	17.5
30	16.5	13.0	21.5	19.0	32.5	19.0	26.0	20.5	29.0	22.5	20.5	17.0
31	---	---	19.0	16.5	---	---	28.5	21.0	30.0	23.0	---	---
MONTH	27.0	2.0	25.0	11.0	32.5	12.0	33.5	17.0	30.0	18.0	31.5	15.0

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO

LOCATION.--Lat 40°51'02", long 83°15'23", in sec. 21, T.2 S., R.14 E., Wyandot County, at gaging station on left bank at downstream side of county road bridge, 0.7 mile downstream from unnamed right bank tributary, 0.8 mile upstream from Rock Run, and 2 miles northeast of Upper Sandusky.

DRAINAGE AREA.--298 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1969 to September 1972.
Water temperatures: June 1969 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,300 micromhos Nov. 22; minimum, 229 micromhos Apr. 21.
Water temperatures: Maximum, 29.5°C July 22, 23; minimum, freezing point on many days during November, January to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
07...	1930	4.5	230	0	270	46	.8	1.2
10...	1930	35	186	0	200	40	.7	1.1
18...	1145	--	--	--	--	--	--	--
NOV.								
12...	1630	12	262	6	260	55	.8	1.0
26...	1800	11	258	10	230	55	.7	1.3
DEC.								
05...	1646	18	248	0	200	63	.6	3.6
19...	1025	77	154	0	110	33	.3	4.5
JAN.								
12...	1435	290	118	0	88	30	.3	9.5
30...	1835	52	230	0	160	42	.4	7.7
FEB.								
10...	0746	38	285	0	180	57	.5	2.5
20...	1835	160	152	0	97	35	.3	3.3
MAR.								
01...	1830	160	180	0	130	62	.4	2.5
23...	1820	1340	180	0	60	22	.2	7.3
APR.								
02...	1825	128	198	10	140	29	.4	3.7
21...	1430	5470	78	0	30	6.0	.3	3.4
MAY								
11...	0930	745	122	0	67	17	.3	8.7
31...	2020	120	236	0	130	27	.4	2.6
JUNE								
14...	1500	--	--	--	--	--	--	--
15...	2100	188	132	0	72	22	.4	12
28...	1110	33	242	0	160	33	.5	3.2
JULY								
02...	1810	86	140	0	80	19	.4	9.0
30...	2220	20	234	0	150	37	.5	2.5
AUG.								
13...	2100	16	204	0	210	47	.6	1.0
27...	1755	41	162	4	100	24	.4	3.0
SEP.								
10...	1955	12	234	0	220	40	.6	1.3
27...	1846	274	176	0	85	23	.3	3.5

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-70, 1971-72): Maximum, 1,300 micromhos Nov. 22, 1971; minimum, 200 micromhos June 18, 1970.
Water temperatures (1971-72): Maximum, 29.5°C July 22, 23, 1972; minimum, freezing point on many days during winter period.

REMARKS.--Continuous water-quality recorder operated since June 1969. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Maximum recorded water temperature of 33.0°C occurred on Aug. 9, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
07...	5.1	672	400	210	1000	8.1	--	--
10...	5.0	516	320	170	800	7.1	--	--
18...	--	--	--	--	--	--	<.5	13
NOV.								
12...	4.4	732	450	220	1050	8.4	--	--
26...	5.8	672	450	220	985	8.4	--	--
DEC.								
05...	16	660	400	200	963	8.2	--	--
19...	20	436	290	160	636	8.1	--	--
JAN.								
12...	42	348	230	130	516	7.9	--	--
30...	34	530	390	200	814	7.8	--	--
FEB.								
10...	11	645	430	200	941	7.7	--	--
20...	15	392	250	120	567	8.2	--	--
MAR.								
01...	11	460	290	140	748	8.2	--	--
23...	32	250	180	98	389	7.8	--	--
APR.								
02...	16	474	360	180	700	8.4	--	--
21...	15	152	110	46	232	7.8	--	--
MAY								
11...	38	282	200	100	424	7.6	--	--
31...	11	468	350	160	696	8.2	--	--
JUNE								
14...	--	--	--	--	--	--	<.5	6.0
15...	55	334	230	120	504	7.3	--	--
28...	14	502	380	180	773	8.0	--	--
JULY								
02...	40	302	220	100	492	7.5	--	--
30...	11	500	360	170	763	7.7	--	--
AUG.								
13...	4.6	564	370	200	845	7.7	--	--
27...	13	364	260	120	562	8.4	--	--
SEP.								
10...	58	574	390	200	851	7.8	--	--
27...	15	342	250	110	526	7.7	--	--

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1020	966	---	---	---	---	489	383	892	868	749	684
2	1060	1010	---	---	---	---	577	481	934	885	686	419
3	1030	962	---	---	892	884	642	574	927	875	422	407
4	988	908	---	---	939	887	700	634	882	867	520	422
5	955	905	---	---	970	931	704	676	875	835	580	520
6	979	925	---	---	968	784	733	701	893	855	637	580
7	1040	977	---	---	848	605	751	725	957	893	666	637
8	1010	937	---	---	855	789	799	743	934	889	678	664
9	1010	923	---	---	806	692	827	767	922	881	685	653
10	986	756	---	---	785	692	797	590	948	909	656	622
11	1050	887	---	---	798	686	590	425	949	916	663	626
12	981	909	---	---	789	698	542	460	1080	921	692	660
13	953	887	---	---	795	775	604	536	1160	937	712	449
14	935	801	---	---	860	683	651	597	1020	865	445	359
15	922	810	1100	1040	770	725	738	649	891	741	442	363
16	947	912	1090	1040	748	634	825	736	757	566	473	441
17	965	818	1180	1040	657	584	860	818	566	407	455	430
18	1010	903	1110	1060	624	593	935	851	465	408	490	428
19	1080	1000	1100	980	658	624	917	806	523	462	544	490
20	1080	1050	1050	939	693	655	800	776	587	521	585	544
21	1050	914	1060	1030	738	693	795	760	588	565	614	584
22	959	882	1300	977	758	735	822	711	615	574	604	406
23	938	899	1000	960	778	758	711	634	664	612	409	363
24	905	845	996	902	801	774	634	570	693	664	491	386
25	894	810	987	924	832	801	624	585	715	691	548	491
26	857	833	987	944	823	809	684	621	735	708	587	548
27	---	---	1010	518	843	819	759	676	762	724	621	587
28	---	---	1020	501	863	839	748	719	771	733	641	621
29	---	---	1000	978	876	850	789	734	754	703	662	640
30	---	---	---	---	858	579	831	789	---	---	679	658
31	---	---	---	---	580	400	878	828	---	---	687	675
MONTH	1080	756	---	---	970	400	935	383	1160	407	749	359

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	704	686	656	627	725	698	776	581	728	686	800	744
2	707	689	666	653	710	668	668	504	737	696	795	762
3	709	696	675	657	726	710	527	393	770	729	854	795
4	708	690	680	656	740	717	510	423	822	744	854	785
5	702	681	692	666	729	713	593	510	837	776	824	795
6	698	676	695	659	744	726	609	588	848	791	837	783
7	647	404	698	645	762	722	638	608	885	846	825	765
8	442	394	701	605	771	743	654	597	929	885	857	800
9	521	424	618	354	776	735	651	626	924	866	869	821
10	542	521	396	338	776	717	681	651	866	830	881	815
11	584	542	471	377	746	711	693	678	863	833	923	864
12	611	581	530	474	720	696	692	668	857	771	953	902
13	573	344	576	530	744	582	696	677	857	800	941	845
14	380	327	593	455	716	621	702	680	866	821	851	680
15	475	372	557	300	627	509	693	560	887	845	806	536
16	502	394	359	317	593	516	609	560	884	815	600	446
17	433	365	459	359	630	593	611	552	878	840	575	542
18	459	374	524	459	666	626	623	584	891	573	618	575
19	544	469	569	524	687	666	629	576	828	609	---	---
20	547	238	599	569	704	683	633	596	773	551	690	681
21	249	229	623	600	737	704	654	633	684	618	705	690
22	306	237	635	620	756	737	690	654	734	638	740	705
23	349	306	654	635	764	747	708	668	698	621	776	678
24	442	342	662	647	765	755	695	575	663	494	765	666
25	488	432	669	642	773	743	696	641	536	488	767	726
26	524	475	684	636	777	759	692	665	567	536	729	650
27	552	513	690	618	783	755	705	680	603	567	735	536
28	589	552	674	606	786	752	728	678	651	603	599	512
29	617	587	681	638	768	569	719	677	669	651	548	522
30	646	615	711	617	780	636	749	696	719	669	531	419
31	---	---	723	702	---	---	729	695	800	719	---	---
MONTH	709	229	723	300	786	509	776	393	929	488	953	419
YEAR	1300	229										

04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	13.0	11.7	14.9	14.3	14.9	14.2
2	---	---	---	---	---	---	13.2	13.0	14.9	13.9	14.3	12.3
3	---	---	---	---	14.2	11.4	14.0	13.2	15.0	13.5	14.4	12.9
4	---	---	---	---	14.6	10.9	13.7	13.4	14.9	14.5	14.7	14.4
5	---	---	---	---	13.2	9.8	14.4	13.6	14.9	14.9	14.9	14.4
6	---	---	---	---	11.1	7.3	14.9	14.3	15.0	14.1	15.0	14.9
7	---	---	---	---	8.1	6.2	14.6	14.2	14.9	13.6	15.0	14.7
8	---	---	---	---	9.7	7.8	14.7	14.4	14.9	13.2	15.0	14.4
9	---	---	---	---	8.9	7.9	14.5	14.0	14.0	13.0	15.0	15.0
10	---	---	---	---	8.5	6.6	14.6	13.7	14.6	12.8	15.0	15.0
11	---	---	---	---	8.1	6.5	14.1	13.8	14.8	12.7	15.0	14.7
12	---	---	---	---	9.7	7.5	14.3	14.0	14.9	12.8	14.8	13.6
13	---	---	---	---	10.9	6.0	14.2	13.7	14.9	12.9	13.6	12.2
14	---	---	---	---	10.2	8.3	15.0	14.2	14.7	13.1	12.6	12.3
15	---	---	---	---	12.2	7.5	15.0	15.0	15.0	14.3	13.3	12.6
16	---	---	---	---	13.1	7.7	15.0	10.9	14.3	12.8	13.3	12.8
17	---	---	---	---	15.0	8.7	15.0	14.6	13.4	12.9	12.8	12.7
18	---	---	---	---	15.0	9.3	14.8	13.6	14.0	13.4	13.2	12.8
19	---	---	---	---	11.5	10.1	14.9	13.8	14.7	13.7	13.9	13.2
20	---	---	---	---	10.8	9.9	14.8	12.5	14.9	13.3	13.6	13.1
21	---	---	---	---	10.5	9.8	15.0	14.8	15.0	14.8	13.3	12.2
22	---	---	---	---	11.0	9.9	15.0	14.2	14.8	14.8	12.2	11.6
23	---	---	12.5	9.8	11.1	10.2	15.0	14.7	15.0	14.8	13.2	12.0
24	---	---	11.7	6.5	10.2	9.4	15.0	14.9	14.9	14.9	14.1	13.3
25	---	---	12.1	6.3	10.2	9.2	14.9	14.6	15.0	14.9	14.0	13.5
26	---	---	12.8	6.2	9.5	8.8	14.6	13.3	15.0	15.0	14.3	13.5
27	---	---	10.0	5.1	8.8	7.2	15.0	13.4	15.0	15.0	13.7	13.0
28	---	---	10.2	5.0	9.7	7.6	15.0	15.0	15.0	15.0	13.8	12.8
29	---	---	10.0	5.9	10.5	7.8	15.0	14.9	15.0	14.9	13.5	12.5
30	---	---	---	---	14.5	8.9	15.0	14.8	---	---	14.9	13.0
31	---	---	---	---	13.5	8.9	15.0	14.9	---	---	15.0	13.3
MONTH	---	---	---	---	15.0	6.2	15.0	10.9	15.0	12.7	15.0	11.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.8	13.0	9.8	8.3	9.5	8.1	6.9	5.0	15.0	8.0	13.2	5.7
2	15.0	12.4	9.9	8.0	8.9	6.7	6.2	5.1	13.6	7.7	10.7	6.0
3	14.8	14.2	11.1	8.1	8.6	6.9	7.1	5.6	9.3	5.4	8.5	5.7
4	14.8	12.9	11.5	8.6	8.2	5.0	7.6	7.1	8.5	4.5	8.9	5.5
5	14.7	13.0	13.7	9.4	6.9	4.4	7.8	7.3	9.3	4.9	12.3	7.3
6	15.0	11.0	14.1	9.3	8.6	6.7	8.0	7.5	6.6	4.6	14.7	7.8
7	11.9	10.9	14.8	8.7	9.1	6.3	8.4	7.5	6.5	4.2	15.0	9.0
8	12.6	11.8	10.4	7.8	9.4	6.5	8.0	7.0	6.0	4.3	14.2	7.6
9	12.9	12.5	8.9	8.1	8.0	6.3	7.6	7.0	7.7	5.1	14.3	7.3
10	12.5	11.9	9.3	8.8	---	---	7.9	6.9	11.5	6.4	14.7	9.3
11	12.1	11.4	9.1	8.7	---	---	8.5	6.5	15.0	7.8	14.8	7.9
12	12.3	10.7	9.0	8.6	---	---	8.7	5.8	15.0	9.9	11.3	5.8
13	11.3	8.8	8.6	7.6	---	---	8.8	5.7	15.0	9.4	13.2	5.8
14	9.3	8.7	9.4	8.0	---	---	8.3	5.5	14.0	8.1	10.1	6.2
15	9.5	9.3	8.4	7.6	---	---	6.7	5.6	11.5	5.8	8.2	7.7
16	9.8	9.2	7.9	7.6	---	---	6.9	5.6	10.8	6.1	8.4	8.0
17	10.0	9.7	8.4	7.9	---	---	6.6	6.0	10.8	5.2	8.5	7.9
18	9.9	9.5	8.4	8.0	---	---	7.6	5.9	7.6	5.1	8.0	7.6
19	9.5	7.7	8.1	7.7	---	---	6.8	5.8	7.0	4.5	---	---
20	9.5	8.8	8.2	7.5	---	---	7.5	5.5	12.0	6.1	8.4	8.4
21	9.7	8.9	9.4	7.6	---	---	7.9	5.7	9.1	5.8	9.5	7.5
22	9.9	9.6	9.9	7.5	---	---	9.8	5.4	8.0	5.0	10.2	7.9
23	9.8	9.4	10.1	7.1	---	---	10.4	5.1	6.4	4.1	9.4	7.8
24	10.1	9.6	10.6	6.7	---	---	15.0	3.5	6.3	5.7	9.1	7.8
25	10.5	10.1	11.8	6.6	---	---	15.0	6.4	6.3	5.5	9.9	8.5
26	10.4	9.9	14.6	7.1	---	---	13.2	5.7	6.5	5.3	8.7	8.0
27	10.3	9.8	15.0	7.7	---	---	10.0	6.1	6.0	4.9	9.1	8.0
28	10.2	9.5	14.7	8.5	14.1	9.7	12.1	6.3	7.0	5.3	9.5	9.1
29	10.0	9.4	15.0	9.6	9.9	4.7	15.0	8.2	7.9	5.1	9.5	9.2
30	10.1	9.2	10.8	6.4	7.6	3.9	15.0	9.1	9.4	5.5	9.9	9.3
31	---	---	7.9	6.3	---	---	15.0	9.4	11.8	5.9	---	---
MONTH	15.0	7.7	15.0	6.3	---	---	15.0	3.5	15.0	4.1	15.0	5.5

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04196500 SANDUSKY RIVER NEAR UPPER SANDUSKY, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	17.5	---	---	---	---	4.0	2.5	1.0	1.0	4.5	0.5
2	24.5	17.5	---	---	---	---	3.0	2.5	1.0	1.0	5.0	3.0
3	23.0	18.5	---	---	3.0	0.5	2.5	1.5	1.0	0.5	3.0	0.5
4	23.0	17.5	---	---	2.5	0.5	2.0	1.5	1.5	1.0	2.0	0.0
5	21.5	15.5	---	---	3.0	1.5	1.0	0.0	1.5	0.5	0.5	0.0
6	19.0	15.0	---	---	5.0	3.0	1.0	0.0	1.0	0.5	1.0	0.0
7	18.0	12.5	---	---	5.5	4.5	0.5	0.0	0.5	0.5	1.0	0.0
8	16.5	11.0	---	---	5.0	4.5	1.0	0.0	0.5	0.0	1.0	0.5
9	14.5	13.0	---	---	6.5	4.5	1.0	0.5	0.5	0.0	0.5	0.0
10	14.5	11.5	---	---	9.5	6.5	2.0	0.0	0.5	0.0	0.5	0.0
11	15.0	11.5	---	---	9.5	7.0	2.5	1.5	0.0	0.0	2.5	0.0
12	16.0	10.5	---	---	7.0	5.5	3.0	2.5	0.0	0.0	7.0	2.0
13	15.0	10.5	---	---	5.5	4.0	3.5	1.5	0.0	0.0	6.5	5.0
14	17.0	13.0	---	---	5.5	3.0	1.5	0.0	0.5	0.0	5.5	3.5
15	19.0	12.0	15.0	10.5	8.0	5.5	0.5	0.0	0.0	0.0	4.0	2.5
16	19.0	14.0	11.5	7.5	8.5	7.5	1.5	0.5	0.0	0.0	4.0	3.0
17	19.5	15.0	14.0	5.5	7.5	5.5	1.0	0.0	0.5	0.0	4.0	3.0
18	19.5	14.5	14.5	10.5	5.5	3.0	0.5	0.0	0.5	0.0	3.0	3.0
19	21.5	15.5	15.0	11.5	3.0	2.0	0.0	0.0	0.0	0.0	3.5	2.0
20	22.0	15.0	---	6.5	2.5	2.0	1.0	0.0	1.0	0.0	5.0	3.0
21	22.0	16.0	7.5	5.5	3.0	2.5	1.5	1.0	1.0	0.0	8.0	4.5
22	19.5	17.5	---	2.5	2.5	1.5	1.5	0.5	0.5	0.0	8.0	5.0
23	19.5	18.0	9.5	0.0	2.5	1.5	0.5	0.0	1.0	0.0	5.0	2.5
24	19.0	17.0	0.5	0.0	3.0	2.0	3.0	0.0	0.5	0.0	2.5	1.5
25	18.0	16.5	1.5	0.0	4.0	2.0	3.0	1.5	1.0	0.0	3.5	2.0
26	16.0	16.0	1.5	0.0	5.0	4.0	2.0	1.5	1.0	0.0	4.0	2.0
27	---	---	1.0	0.0	7.5	5.0	2.0	1.5	1.5	0.0	6.5	3.0
28	---	---	2.0	1.0	7.5	3.5	1.5	1.0	2.5	0.0	7.5	5.0
29	---	---	1.0	0.0	3.5	3.0	1.5	1.0	1.0	0.0	7.0	5.5
30	---	---	---	---	7.0	3.0	1.5	1.0	---	---	6.0	5.0
31	---	---	---	---	6.5	3.5	1.5	1.0	---	---	7.0	4.5
MONTH	25.0	10.5	---	---	9.5	0.5	4.0	0.0	2.5	0.0	8.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	18.0	13.5	16.5	16.0	22.0	19.5	26.0	22.0	26.0	22.0
2	5.5	4.5	19.0	17.0	19.5	16.5	22.0	20.5	25.0	23.0	23.5	21.0
3	7.5	4.0	18.0	17.0	21.5	18.5	21.0	19.0	25.5	23.0	21.0	19.0
4	8.5	6.5	17.0	14.5	24.0	20.0	19.5	18.5	26.0	21.5	23.0	18.0
5	10.0	6.5	16.5	13.5	24.0	20.0	19.5	18.5	26.0	20.0	23.0	18.0
6	12.0	8.5	18.5	15.0	22.0	20.5	19.5	18.0	21.5	20.5	24.0	18.5
7	10.0	4.5	20.0	17.0	23.0	19.0	20.5	18.5	22.5	20.5	23.0	18.5
8	4.5	3.0	17.0	14.0	22.5	19.0	21.0	18.5	21.0	19.5	22.0	19.5
9	6.0	3.0	13.5	11.0	22.5	20.0	21.5	19.5	21.0	18.5	23.5	17.5
10	7.5	5.5	12.5	10.5	22.0	18.5	23.0	20.5	24.0	17.0	22.5	16.0
11	10.0	7.5	14.5	12.5	21.0	17.0	24.5	22.0	23.5	18.0	22.0	17.5
12	13.0	9.5	16.5	14.5	20.5	18.0	26.5	23.0	25.0	19.5	21.5	19.5
13	14.5	12.5	16.5	15.5	21.0	19.5	25.5	24.0	27.0	20.0	24.0	20.0
14	14.5	13.5	17.0	15.5	22.5	20.5	26.0	23.0	26.5	21.0	26.5	19.5
15	14.0	13.0	16.5	14.5	22.0	21.0	25.5	23.5	28.0	22.0	20.0	18.5
16	14.0	12.5	15.5	14.5	21.0	20.0	24.0	23.0	25.5	20.0	18.5	18.0
17	12.5	11.5	16.0	14.5	21.0	19.0	24.5	23.0	26.0	22.5	20.5	18.5
18	13.5	12.0	18.0	16.0	21.0	18.5	26.0	24.0	26.5	23.0	21.5	20.0
19	14.5	13.5	19.5	17.5	23.5	19.0	27.0	25.0	24.0	22.5	---	---
20	14.0	12.0	19.5	18.5	23.5	21.0	28.5	25.0	25.0	22.0	19.5	18.5
21	12.0	10.5	20.0	17.5	22.5	19.5	29.0	26.0	25.5	21.5	20.0	18.0
22	11.0	10.0	21.5	19.5	19.5	16.0	29.5	26.0	24.5	23.0	20.5	16.0
23	12.5	11.0	22.0	20.5	16.0	14.5	29.5	26.5	24.0	22.5	16.0	15.0
24	12.5	11.0	23.0	21.0	15.0	14.0	28.0	25.0	24.0	22.5	17.0	16.0
25	12.0	10.5	23.5	21.0	17.5	14.0	28.0	24.5	24.0	23.0	18.5	16.5
26	12.0	10.0	23.0	20.5	19.0	16.5	25.5	23.5	25.5	23.0	19.0	18.0
27	13.5	11.0	23.0	19.5	22.0	18.5	23.5	22.5	24.0	22.5	19.0	17.5
28	13.5	11.5	22.5	19.0	22.0	19.5	24.0	21.5	24.0	21.0	17.5	16.0
29	14.0	12.5	22.5	19.5	21.5	20.0	25.0	21.0	25.0	21.0	17.0	16.0
30	16.0	13.5	21.0	19.5	21.0	19.5	26.0	21.5	26.0	21.5	16.5	14.0
31	---	---	19.5	16.0	---	---	27.0	22.0	26.0	21.0	---	---
MONTH	16.0	3.0	23.5	10.5	24.0	14.0	29.5	18.0	28.0	17.0	26.5	14.0
YEAR	29.5	0.0										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO

LOCATION.--Lat 40°55'22", long 83°20'56", in SE 1/4 sec.27, T.1 S., R.13 E., Wyandot County, at gaging station on right bank at downstream side of bridge on State Highway 199 (formerly U.S. Highway 23), 0.4 mile northwest of Crawford, 1.5 miles downstream from Lick Run, 2.7 miles upstream from Little Tymochtee Creek, and 3 miles southeast of Carey.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1968 to September 1972.
Water temperatures: January 1968 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,500 micromhos Dec. 4-6; minimum, 150 micromhos Apr. 22.
pH: Maximum, 9.3 Apr. 6, May 6; minimum, 5.9 Aug. 28, 31.
Dissolved oxygen: Maximum, 15.0 mg/l Feb. 29; minimum, 3.3 mg/l Aug. 19.
Water temperatures: Maximum, 31.5°C July 21-23; minimum, 0.5°C on many days during January to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
01...	1900	.30	192	6	380	27	.7	.60
12...	1200	--	--	--	--	--	--	--
30...	1000	2.4	230	0	550	30	.5	.40
NOV.								
12...	1100	2.0	248	0	570	28	.7	.10
24...	1100	.55	250	0	590	33	.7	.30
DEC.								
07...	1020	5.1	228	0	560	32	.7	.30
20...	1200	37	116	0	110	28	.2	4.7
JAN.								
12...	1110	418	96	0	79	24	.3	13
20...	1200	26	188	0	170	36	.3	11
FEB.								
09...	1300	17	192	4	250	39	.2	9.0
18...	1000	100	100	0	86	33	.2	7.0
MAR.								
09...	1420	90	164	0	140	24	.2	11
14...	1045	1050	72	0	69	16	.2	12
APR.								
03...	1300	40	174	6	190	60	.7	8.4
14...	1000	1000	84	0	54	11	.6	7.3
MAY								
03...	1300	54	174	4	140	18	.7	4.9
10...	1355	1230	78	0	53	13	.5	8.1
JUNE								
08...	1800	--	--	--	--	--	--	--
20...	1700	20	173	0	130	26	.7	12
28...	1800	9.2	170	6	200	26	.8	9.2
JULY								
05...	1200	814	75	0	36	10	.2	14
27...	1115	16	230	0	210	27	.4	1.6
AUG.								
04...	1800	5.1	202	8	190	22	.5	2.0
18...	1500	4.0	210	0	260	24	.5	1.4
SEP.								
08...	0900	2.8	240	0	320	29	.6	.70
17...	1700	75	132	2	100	17	.4	3.2

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
26...	1305	16.5	2.4	20	.13
DEC.					
06...	1020	5.5	2.6	5	.04
JAN.					
12...	1110	4.0	418	73	82
MAR.					
02...	1300	3.0	862	804	1870
09...	1430	2.5	90	28	6.8
APR.					
13...	1250	13.0	690	1500	2790
21...	1815	11.5	4540	997	12200
MAY					
17...	1135	16.0	1910	478	2470
SEP.					
21...	1200	18.5	17	89	4.1

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1969-72): Maximum, 1,500 micromhos on several days during 1970 and 1971; minimum, 150 micromhos Apr. 22, 1972.
pH (1969-72): Maximum, 9.3 Apr. 6, May 6, 1972; minimum, 5.5 Feb. 5, 1970.
Dissolved oxygen (1969-72): Maximum, 15.0 mg/l on several days during 1969, 1970 and 1972; minimum, 2.4 mg/l Aug. 22, 1970.
Water temperatures (1969-72): Maximum, 31.5°C July 21-23, 1972; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since January 1968. Minimum recorded pH of 5.2 occurred Aug. 20, 1969. Minimum recorded dissolved oxygen concentrations of 1.5 mg/l occurred Aug. 25, 1968 and Aug. 20, 1969. Specific conductance values listed as 1,500 micromhos represent values of 1,500 micromhos or greater, due to instrument limitations. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
01...	2.6	812	570	400	1060	--	--
12...	--	--	--	--	--	<.5	6.0
30...	2.0	1110	760	570	1360	--	--
NOV.							
12...	.6	1050	760	560	1350	--	--
24...	1.5	1110	790	580	1430	--	--
DEC.							
07...	1.2	1040	740	550	1360	--	--
20...	21	348	260	160	573	--	--
JAN.							
12...	59	304	210	130	444	--	--
20...	48	526	390	240	754	--	--
FEB.							
09...	40	672	480	320	997	--	--
18...	31	308	210	130	496	--	--
MAR.							
09...	48	430	330	200	653	--	--
14...	53	274	180	120	387	--	--
APR.							
03...	37	506	380	230	755	--	--
14...	32	196	140	71	320	--	--
MAY							
03...	22	418	320	170	637	--	--
10...	36	194	140	76	327	--	--
JUNE							
08...	--	--	--	--	--	<.5	5.0
20...	55	424	320	180	671	--	--
28...	41	518	390	240	756	--	--
JULY							
05...	63	226	150	88	328	--	--
27...	7.0	528	420	230	798	--	--
AUG.							
04...	9.1	468	390	210	741	--	--
18...	6.4	594	450	280	854	--	--
SEP.							
08...	3.2	686	530	330	985	--	--
17...	14	286	230	120	479	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR.										
02...	1300	63	78	87	96	99	100	--	--	--
APR.										
13...	1250	65	83	94	98	99	100	--	--	--
21...	1815	75	89	94	96	98	98	99	99	100
MAY										
17...	1135	87	93	96	98	99	100	--	--	--

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1080	1030	1380	1350	1440	1390	497	356	857	815	800	647
2	1090	1060	1420	1330	1470	1440	443	359	881	857	647	384
3	1090	1060	1340	1330	1490	1480	491	443	897	881	408	385
4	1100	1070	1360	1340	1500	1490	521	471	930	890	401	384
5	1120	1100	1400	1350	1500	1500	548	498	962	930	495	399
6	1140	1120	1370	1350	1500	1450	582	524	954	906	547	495
7	1230	1130	1350	1340	1450	1200	602	570	945	908	613	547
8	1240	1220	1360	1340	1470	1270	644	566	986	944	637	604
9	1240	1170	1360	1300	1450	1200	648	611	1010	980	664	621
10	1230	1200	1380	1310	1310	1210	620	564	1060	1010	685	642
11	1210	1150	1390	1320	1300	1190	564	437	1040	1020	690	657
12	1220	1190	1390	1330	1310	1200	468	428	1070	1030	689	660
13	1210	1150	1410	1360	1200	1180	523	468	1070	981	674	367
14	1170	1160	1410	1360	1200	1090	555	523	981	861	402	364
15	1190	1150	1400	1360	1110	1080	---	---	861	738	397	382
16	1160	1140	1400	1350	1080	814	---	---	743	665	450	397
17	1210	1160	1460	1360	814	605	---	---	722	542	462	445
18	1220	1190	1450	1320	605	497	---	---	542	495	480	439
19	1240	1190	1350	1290	532	500	785	767	507	456	534	477
20	1270	1230	1310	1300	568	532	789	779	540	491	573	531
21	1270	1240	1320	1310	604	568	822	785	587	538	601	570
22	1290	1260	1360	1310	626	590	837	710	632	569	613	577
23	1310	1290	1420	1360	653	626	710	593	684	631	591	488
24	1320	1310	1430	1420	683	652	683	555	695	682	502	460
25	1330	1310	1430	1410	710	683	590	549	692	675	585	502
26	1350	1310	1450	1390	716	707	588	551	717	675	632	585
27	1340	1310	1490	1430	725	715	614	566	736	714	673	632
28	1350	1320	1460	1450	746	718	657	614	764	731	711	673
29	1370	1340	1450	1340	755	746	701	651	797	763	733	711
30	1390	1330	1390	1320	821	750	755	701	---	---	752	733
31	1380	1340	---	---	800	497	815	755	---	---	779	752
MONTH	1390	1030	1490	1290	1500	497	837	356	1070	456	800	364

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	772	765	604	585	738	630	626	407	779	702	830	792
2	791	769	630	604	777	738	492	413	788	728	---	---
3	806	754	664	630	756	732	537	290	773	722	---	---
4	794	777	673	655	755	725	440	254	784	735	---	---
5	811	777	686	672	770	710	394	326	811	721	962	951
6	806	776	701	686	759	710	522	394	825	755	983	951
7	776	318	717	701	756	711	574	522	787	766	1000	977
8	354	300	723	657	765	716	591	561	805	776	1030	989
9	359	286	652	274	768	720	585	504	842	779	1040	1030
10	438	356	319	268	779	741	564	516	864	789	1050	1030
11	466	432	307	250	789	737	637	564	880	792	1070	1040
12	521	466	432	307	795	755	679	637	851	704	1070	1040
13	534	312	498	432	783	578	705	679	842	711	1040	831
14	421	252	535	498	606	509	735	676	808	710	924	354
15	322	243	508	301	738	606	741	718	851	795	452	372
16	405	322	322	232	743	573	750	730	833	819	638	447
17	381	328	297	231	588	551	750	730	839	815	773	444
18	328	280	403	297	627	588	756	744	866	797	467	435
19	417	291	484	403	662	627	772	741	824	791	516	467
20	421	193	538	484	692	662	772	721	830	782	543	516
21	198	153	574	433	725	692	750	696	809	776	572	534
22	201	150	609	574	726	710	746	702	837	765	608	569
23	225	201	645	609	726	716	752	679	830	789	612	596
24	271	204	667	645	759	725	733	681	837	713	627	597
25	367	271	691	667	780	743	728	704	927	837	671	627
26	432	367	711	691	786	752	752	696	908	779	672	426
27	472	432	721	699	804	746	805	752	844	793	497	440
28	514	472	729	703	798	708	799	672	866	710	615	495
29	550	514	744	709	741	645	740	685	851	828	582	486
30	585	550	735	643	740	336	751	673	854	776	474	300
31	---	---	655	586	---	---	752	685	873	797	---	---
MONTH	811	150	744	231	804	336	805	254	927	702	1070	300
YEAR	1500	150										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.1	7.5	7.2	7.5	7.3	7.1	6.9	7.4	7.2	8.0	7.5
2	7.5	7.0	7.7	7.5	7.5	7.3	7.1	6.9	7.5	7.3	7.3	6.7
3	7.5	7.1	7.6	7.3	7.5	7.3	7.3	6.9	7.4	7.3	6.9	6.7
4	7.5	7.1	7.7	7.4	7.6	7.3	7.3	7.0	7.4	7.2	6.9	6.7
5	7.5	7.1	7.8	7.5	7.5	7.3	7.4	7.1	7.5	7.3	7.1	6.8
6	7.4	7.2	7.7	7.5	7.5	7.4	7.4	7.2	7.5	7.1	7.4	7.2
7	7.3	7.2	7.6	7.4	7.5	7.4	7.4	7.2	7.4	7.1	7.7	7.4
8	7.4	7.1	7.8	7.5	7.5	7.4	7.4	7.2	7.5	7.2	7.6	7.5
9	7.4	7.3	7.7	7.6	7.5	7.4	7.5	7.3	7.4	7.3	7.8	7.6
10	7.3	7.1	7.8	7.6	7.6	7.4	7.5	7.3	7.5	7.3	8.0	7.6
11	7.4	7.2	7.8	7.5	7.8	7.4	7.4	7.1	7.5	7.3	8.1	7.8
12	8.0	7.1	7.8	7.6	7.7	7.5	7.2	7.1	7.6	7.4	8.2	8.0
13	7.9	7.6	7.7	7.5	7.8	7.5	7.3	6.8	7.5	7.2	8.0	7.2
14	7.8	7.5	7.9	7.6	7.5	7.5	7.0	6.8	7.5	7.2	7.7	7.5
15	7.9	7.5	7.9	7.7	7.7	7.5	---	---	7.4	7.2	7.7	7.6
16	7.9	7.6	7.8	7.5	7.6	7.3	---	---	7.4	7.2	7.8	7.6
17	7.7	7.4	7.9	7.5	7.3	6.9	---	---	7.4	7.1	7.9	7.7
18	7.8	7.4	7.9	7.7	6.9	6.7	---	---	7.1	6.5	8.1	7.7
19	7.6	7.3	7.8	7.5	6.9	6.8	7.5	7.4	6.7	6.5	8.4	8.0
20	7.6	7.3	7.7	7.5	7.0	6.6	7.4	7.3	6.9	6.5	8.6	8.3
21	7.6	7.3	7.6	7.5	7.1	7.0	7.5	7.3	7.0	6.8	8.7	8.4
22	7.6	7.4	7.7	7.5	7.1	6.6	7.5	7.3	7.1	6.6	8.7	8.3
23	7.6	7.4	7.8	7.6	7.0	6.9	7.4	7.1	7.1	6.9	8.4	8.0
24	7.5	7.2	7.7	7.6	7.2	7.0	7.3	7.1	7.3	7.0	8.3	8.0
25	7.3	7.2	7.6	7.5	7.2	7.0	7.4	7.1	7.6	7.0	8.5	8.2
26	7.5	7.2	7.7	7.4	7.3	7.2	7.2	7.0	7.6	7.0	8.7	8.4
27	7.6	7.2	7.9	7.6	7.4	7.2	7.3	7.0	7.7	7.2	8.8	8.6
28	7.5	7.3	7.7	7.5	7.3	7.1	7.2	7.2	7.9	7.3	8.8	8.7
29	7.6	7.3	7.7	7.5	7.3	7.1	7.3	7.1	8.1	7.5	8.9	8.7
30	7.6	7.2	7.6	7.3	7.8	7.3	7.3	7.2	---	---	9.0	8.7
31	7.6	7.3	---	---	7.5	7.1	7.4	7.2	---	---	9.0	8.5
MONTH	8.0	7.0	7.9	7.2	7.8	6.6	7.5	6.8	8.1	6.5	9.0	6.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.8	8.4	8.5	8.3	7.8	6.9	7.2	6.8	7.9	7.3	8.3	7.8
2	8.8	8.4	8.6	8.1	7.9	7.5	7.1	6.9	7.7	7.3	---	---
3	9.0	8.4	8.7	7.5	7.8	7.5	7.0	6.8	7.7	7.3	---	---
4	9.0	8.5	8.6	8.4	8.0	7.4	6.9	6.7	7.5	6.0	---	---
5	9.2	8.6	9.0	8.4	8.2	7.4	7.3	6.9	7.5	7.1	7.8	7.7
6	9.3	8.7	9.3	8.6	8.0	7.5	7.6	7.3	7.3	7.1	7.8	7.5
7	8.7	7.2	9.1	8.6	8.1	7.2	7.6	7.4	7.3	7.2	8.0	7.5
8	7.6	7.2	8.8	8.5	8.0	7.1	7.7	7.5	7.2	7.1	7.8	7.7
9	7.8	7.5	8.5	7.4	7.8	7.2	7.6	7.5	7.2	7.0	7.9	7.5
10	8.3	7.8	7.6	7.4	7.5	7.0	7.7	7.4	7.4	7.0	8.0	7.6
11	8.4	8.1	7.7	7.1	7.7	7.0	7.9	7.5	7.4	7.1	8.1	7.6
12	8.5	8.2	8.1	7.5	7.8	7.2	8.0	7.6	7.8	7.2	7.9	7.6
13	8.4	7.7	8.2	7.9	7.6	7.0	8.0	7.6	7.9	7.6	7.9	7.6
14	7.8	7.0	8.4	8.1	7.2	6.9	8.2	7.6	7.7	7.5	7.6	7.2
15	7.4	7.0	8.1	7.5	7.3	7.2	8.0	7.8	8.1	7.6	7.2	7.1
16	7.7	7.4	7.6	7.1	7.5	7.2	8.0	7.7	7.9	7.3	7.3	7.1
17	7.6	7.4	7.6	7.1	7.3	7.0	8.2	7.7	7.9	7.4	7.5	7.3
18	7.5	7.3	8.1	7.6	7.5	7.2	8.4	7.7	7.6	7.3	7.3	7.2
19	7.8	7.3	8.4	8.2	7.5	7.3	8.5	7.7	7.9	7.2	7.3	7.2
20	7.8	6.0	8.5	8.2	7.6	7.3	8.7	7.9	8.4	7.3	7.5	6.0
21	6.8	6.4	8.7	8.3	7.4	7.3	8.4	7.8	8.2	7.3	7.5	7.2
22	6.7	6.4	8.6	8.4	7.5	7.3	8.2	7.7	7.9	7.4	7.6	7.2
23	7.0	6.7	8.8	8.4	7.6	7.3	8.1	7.6	8.2	7.4	7.5	7.3
24	7.1	6.8	8.8	8.4	7.7	7.4	8.1	7.8	8.0	7.3	7.6	7.3
25	7.6	7.1	8.9	7.7	7.7	7.4	8.2	8.0	7.8	7.2	7.6	7.3
26	7.8	7.5	8.2	7.6	7.6	7.3	8.5	7.9	8.2	7.2	7.5	7.0
27	8.0	7.7	8.3	7.5	7.8	7.3	8.3	7.6	7.7	7.2	7.1	7.0
28	8.2	7.8	8.3	7.5	7.8	7.3	8.2	7.7	7.5	5.9	7.4	7.0
29	8.3	8.0	8.2	7.6	7.4	7.0	8.0	7.4	6.8	6.3	7.4	7.1
30	8.5	8.2	7.9	7.2	7.1	6.8	8.1	7.4	8.0	6.7	7.1	6.9
31	---	---	7.2	6.9	---	---	7.9	7.4	8.3	5.9	---	---
MONTH	9.3	6.0	9.3	6.9	8.2	6.8	8.7	6.7	8.4	5.9	8.3	6.0
YEAR	9.3	5.9										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.8	5.9	7.6	6.3	12.4	10.9	10.6	10.4	12.7	12.0	14.4	11.4
2	8.7	5.5	8.5	6.5	12.6	11.6	10.8	10.6	12.5	11.9	11.6	10.9
3	10.4	5.4	8.9	7.1	12.8	11.8	11.1	10.4	12.2	11.8	11.8	11.6
4	8.4	5.1	9.7	8.4	12.9	11.4	11.4	11.0	12.6	11.8	12.1	9.9
5	6.9	4.7	10.1	9.3	12.6	11.3	11.6	11.2	12.5	11.8	11.2	9.6
6	7.2	5.0	9.9	9.5	11.3	10.6	12.3	11.3	12.0	11.6	13.4	10.5
7	9.0	5.7	11.4	9.8	11.0	10.3	12.0	10.3	12.0	11.3	12.7	12.2
8	9.5	7.9	11.8	11.0	10.3	9.8	11.7	10.5	11.9	10.9	12.9	12.3
9	9.4	8.0	11.8	11.2	11.0	9.8	11.4	11.1	12.1	10.7	14.1	12.9
10	10.2	7.9	11.7	11.0	10.5	9.7	11.1	10.8	12.2	10.7	14.2	10.5
11	10.6	8.8	11.4	10.9	10.3	9.7	11.2	10.7	12.3	10.7	13.7	12.7
12	9.4	8.0	11.3	10.8	10.5	9.7	10.7	10.5	12.7	10.6	12.9	11.7
13	8.6	7.5	10.9	10.4	11.3	10.0	11.0	10.4	12.2	10.6	11.9	11.5
14	7.6	6.5	10.9	10.0	11.4	10.5	11.5	10.9	12.6	10.4	11.8	10.5
15	8.2	6.9	10.0	9.2	10.7	10.0	---	---	11.9	10.4	10.8	10.7
16	8.3	6.9	9.8	8.9	10.2	9.5	---	---	11.9	11.3	11.4	10.8
17	8.1	6.7	10.0	8.9	10.5	9.4	---	---	12.0	11.4	11.3	11.2
18	8.1	6.6	9.8	8.8	10.8	10.5	---	---	11.5	11.2	11.2	11.1
19	7.7	6.4	9.2	8.2	11.4	10.8	13.8	12.6	11.8	11.3	11.5	11.2
20	7.3	6.2	10.9	8.7	11.4	10.7	12.6	12.5	12.1	11.4	11.4	11.0
21	7.4	5.9	11.3	10.5	11.2	11.0	12.9	12.5	12.2	11.4	11.0	10.3
22	6.9	5.6	12.3	11.3	11.6	11.2	12.8	12.4	12.9	11.6	10.7	10.3
23	5.9	4.6	12.7	11.6	11.6	11.2	12.6	12.4	13.1	11.5	11.2	10.7
24	5.6	4.1	12.2	11.6	11.4	10.6	12.9	12.6	13.3	11.8	11.6	11.2
25	5.2	4.5	12.1	11.1	11.7	11.0	13.2	12.6	14.1	11.8	11.6	11.4
26	7.0	4.4	11.9	11.0	11.0	10.3	14.0	13.2	14.4	12.0	11.7	11.1
27	7.5	5.6	12.6	10.7	10.5	9.7	13.5	10.2	14.8	12.2	11.3	10.8
28	7.4	6.2	12.1	10.1	10.8	9.6	12.9	12.5	14.6	12.2	11.2	10.7
29	7.7	6.4	11.4	10.8	11.1	10.5	12.6	12.4	15.0	12.2	11.0	10.7
30	7.7	6.4	12.5	10.7	11.6	11.1	12.6	12.3	---	---	11.4	10.9
31	7.5	6.4	---	---	11.1	10.5	12.5	12.2	---	---	11.5	10.8
MONTH	10.8	4.1	12.7	6.3	12.9	9.4	14.0	10.2	15.0	10.4	14.4	9.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.7	11.0	7.6	7.2	8.5	7.7	6.8	6.4	14.4	6.9	9.8	4.6
2	12.0	11.2	7.5	7.0	9.0	7.9	6.8	6.6	12.7	6.5	---	---
3	12.3	10.7	7.6	6.8	9.2	7.8	6.8	6.3	12.5	5.5	---	---
4	12.1	10.4	7.9	7.2	9.9	8.0	6.7	6.3	12.0	5.4	---	---
5	11.8	9.9	8.6	7.6	10.7	7.7	7.1	6.7	12.3	5.8	8.9	6.2
6	11.4	9.3	9.7	7.8	10.5	7.5	7.4	7.0	9.8	5.9	9.5	5.6
7	11.5	9.7	10.6	7.9	11.7	8.0	7.6	7.4	9.7	5.7	10.6	6.2
8	11.7	11.1	9.2	7.9	11.1	7.7	7.8	7.4	8.8	5.8	8.7	6.2
9	11.4	10.5	9.7	8.0	11.1	7.6	7.6	7.2	9.5	6.0	9.7	5.4
10	10.5	9.9	9.5	7.7	11.4	7.9	7.3	7.0	9.6	6.2	9.9	6.8
11	9.9	9.2	8.0	7.4	11.7	8.2	7.2	6.7	10.6	6.1	10.7	6.8
12	9.3	8.7	7.7	7.5	11.6	8.2	7.6	6.7	11.6	6.1	9.3	5.8
13	8.6	7.7	7.9	7.2	10.2	7.8	8.0	6.7	11.1	5.8	9.5	5.5
14	7.9	6.9	7.4	7.2	7.8	6.7	8.2	6.8	9.3	5.3	7.1	6.3
15	6.9	6.7	7.7	6.4	6.9	6.4	8.2	6.8	10.8	4.7	6.8	6.4
16	8.2	6.9	7.6	6.4	7.7	6.8	7.8	6.6	10.3	5.1	7.1	6.2
17	8.4	8.0	7.2	6.2	7.2	6.8	8.9	6.8	9.4	4.7	7.2	6.4
18	8.0	7.2	7.0	6.6	7.6	7.0	9.7	6.8	8.1	4.0	6.4	6.0
19	7.8	7.0	8.0	7.1	8.4	6.7	10.6	6.7	10.3	3.3	6.3	6.1
20	8.4	7.8	7.2	7.1	9.0	6.7	11.6	6.9	12.9	4.7	6.8	6.1
21	8.7	7.5	7.3	6.9	7.9	6.2	11.6	7.0	11.7	5.6	7.7	6.3
22	9.4	8.6	7.2	6.4	8.7	7.0	11.6	7.2	8.4	4.3	8.4	6.5
23	9.1	8.6	7.2	6.8	9.6	7.9	11.3	6.7	10.1	4.0	8.3	7.0
24	9.0	8.6	7.3	6.8	10.3	8.3	11.4	6.3	9.3	4.2	8.1	6.7
25	9.4	8.6	9.1	6.9	11.1	8.3	11.0	7.5	7.7	4.5	8.2	6.4
26	9.6	9.0	9.5	7.6	11.7	7.6	13.0	9.6	9.4	4.8	7.0	6.1
27	9.3	8.7	10.1	7.7	13.0	7.5	12.5	7.1	8.9	4.9	6.6	6.1
28	9.0	8.5	10.5	7.6	14.2	7.6	12.0	6.7	11.5	5.0	7.0	6.6
29	8.8	8.0	10.6	7.6	11.1	7.2	11.5	6.7	10.8	5.3	6.9	6.6
30	8.4	7.1	9.5	7.2	7.2	6.2	12.1	6.5	11.5	5.0	8.1	6.6
31	---	---	7.5	7.0	---	---	13.2	6.7	10.2	5.0	---	---
MONTH	12.3	6.7	10.6	6.2	14.2	6.2	13.2	6.3	14.4	3.3	10.7	4.6
YEAR	15.0	3.3										

04196800 TYMOCHTEE CREEK AT CRAWFORD, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	20.5	16.0	14.0	4.0	3.5	3.5	3.0	0.5	0.5	4.5	1.5
2	22.0	20.0	17.0	15.0	4.0	3.0	3.0	2.0	0.5	0.5	4.5	3.0
3	22.5	20.5	15.0	11.5	4.0	3.0	3.5	3.0	0.5	0.5	3.0	2.0
4	21.5	20.0	11.5	8.5	4.0	3.5	3.5	2.5	0.5	0.5	2.0	1.0
5	20.0	17.5	10.0	7.5	4.5	4.0	2.5	1.5	0.5	0.5	1.5	0.5
6	19.0	17.0	9.0	6.5	4.5	4.5	3.5	1.5	0.5	0.5	1.5	0.5
7	17.0	13.5	6.5	3.0	5.5	4.0	3.0	1.5	0.5	0.5	3.0	0.5
8	14.0	11.5	5.5	4.0	6.0	5.0	2.0	1.5	0.5	0.5	2.5	1.0
9	14.0	13.5	5.5	4.5	6.0	5.0	2.0	1.5	0.5	0.5	1.5	0.5
10	13.5	12.0	6.5	3.5	9.0	6.0	2.0	1.5	0.5	0.5	2.5	0.5
11	13.5	11.0	7.0	4.5	8.5	6.0	3.0	1.5	0.5	0.5	3.0	0.5
12	13.5	10.5	7.5	5.5	6.0	5.0	3.5	3.0	0.5	0.5	5.5	2.5
13	14.0	11.5	8.0	5.0	5.0	3.0	3.5	2.0	1.0	0.5	5.0	4.0
14	15.0	12.5	9.5	6.5	4.0	2.5	2.0	0.5	0.5	0.5	5.5	4.5
15	15.5	13.0	12.5	9.5	8.0	40.0	---	---	0.5	0.5	5.0	4.5
16	16.5	15.0	11.5	9.5	6.5	5.5	---	---	0.5	0.5	5.0	4.5
17	17.5	16.0	11.0	9.0	6.0	4.0	---	---	0.5	0.5	5.0	4.5
18	17.5	15.5	12.0	9.0	4.0	2.5	---	---	0.5	0.5	5.0	4.0
19	17.5	15.5	12.0	8.5	2.5	1.5	0.5	0.5	1.5	0.5	5.0	3.5
20	17.5	15.0	8.5	5.5	2.5	1.5	0.5	0.5	1.0	0.5	5.5	4.0
21	17.5	15.5	5.5	3.5	3.0	2.0	0.5	0.5	1.0	0.5	8.0	4.5
22	17.5	17.0	4.5	2.0	2.5	1.0	1.0	0.5	1.0	0.5	8.0	6.0
23	17.5	17.0	4.5	3.5	2.0	1.0	1.0	0.5	0.5	0.5	6.0	5.0
24	17.5	16.5	4.5	4.5	3.0	1.5	---	---	0.5	0.5	5.0	3.5
25	16.5	15.5	5.0	4.5	3.5	1.0	---	---	1.5	0.5	4.5	3.0
26	17.0	15.0	5.0	4.5	4.5	3.5	---	---	1.0	0.5	5.5	3.0
27	17.0	14.5	4.5	3.5	7.5	4.0	1.0	0.5	1.5	0.5	7.5	4.5
28	16.5	15.0	5.0	4.5	7.0	3.0	0.5	0.5	3.0	0.5	8.0	5.0
29	16.0	14.0	4.5	3.5	3.5	2.0	0.5	0.5	3.5	0.5	6.0	5.0
30	16.0	13.5	4.0	3.0	6.5	3.5	0.5	0.5	---	---	6.5	4.5
31	16.5	14.5	---	---	3.5	2.5	0.5	0.5	---	---	8.5	4.5
MONTH	22.5	10.5	17.0	2.0	9.0	1.0	---	---	3.5	0.5	8.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.5	18.0	15.0	16.5	13.5	20.0	18.0	26.5	21.5	25.0	21.5
2	7.0	5.0	19.5	16.5	19.0	15.5	19.0	19.0	25.0	22.5	---	---
3	9.5	4.5	18.5	16.0	21.5	17.5	19.0	18.5	25.0	20.0	---	---
4	10.5	5.5	16.0	14.0	24.5	19.0	19.0	18.0	24.5	20.5	---	---
5	11.5	5.5	18.5	12.5	25.5	18.5	19.0	18.0	23.0	18.5	21.0	18.5
6	13.5	7.5	20.0	14.0	22.0	20.5	18.5	17.0	22.0	19.0	21.5	17.5
7	9.0	3.0	18.5	15.5	25.0	18.5	19.0	17.0	22.0	20.0	22.5	18.0
8	3.5	2.0	15.5	12.5	25.0	18.0	20.0	17.5	20.0	18.5	21.5	20.0
9	4.0	1.5	12.5	9.5	24.0	19.5	20.0	18.5	20.5	17.0	21.5	17.5
10	6.5	4.0	12.0	9.5	22.5	17.0	22.0	19.5	21.5	16.5	20.5	16.5
11	9.0	6.5	14.5	11.0	23.0	15.5	26.0	20.5	21.5	17.5	21.5	18.5
12	11.0	8.5	15.0	13.5	21.0	16.5	28.0	22.0	23.0	19.5	22.0	20.5
13	14.5	11.0	14.5	14.0	20.5	18.5	25.5	22.0	24.0	20.0	24.5	21.0
14	14.5	13.5	16.0	14.5	23.0	18.5	27.5	22.5	24.0	21.0	23.0	19.0
15	15.5	14.0	15.0	14.0	22.0	21.0	26.0	23.0	25.0	22.0	19.0	17.5
16	15.0	12.5	15.0	14.0	21.5	19.5	25.0	22.5	23.0	20.0	19.0	18.0
17	13.0	12.0	16.5	14.5	20.0	18.5	27.5	22.0	25.0	22.5	21.0	18.5
18	15.0	13.0	16.5	15.5	22.5	17.5	29.0	23.0	24.5	23.5	21.5	20.0
19	15.0	14.0	18.5	16.0	25.0	19.0	29.5	23.5	24.5	22.5	21.0	19.0
20	14.0	11.5	18.0	17.5	24.0	20.5	30.5	24.5	24.0	21.0	22.0	17.5
21	11.5	10.5	20.0	17.0	22.0	18.0	31.5	25.5	26.0	21.5	21.0	17.0
22	10.5	10.0	21.5	18.5	18.0	16.0	31.5	26.5	25.0	23.0	19.5	15.5
23	12.5	10.0	22.5	19.5	16.0	14.0	31.5	26.0	25.0	22.5	16.5	14.5
24	12.0	11.0	24.0	20.0	15.0	13.5	28.5	25.0	24.0	22.5	18.5	15.5
25	11.5	10.0	25.0	19.5	20.0	13.5	27.5	23.5	26.0	21.0	19.0	17.0
26	12.0	9.5	25.0	18.5	21.0	16.0	25.5	23.0	26.5	22.0	18.5	17.0
27	12.5	10.0	24.0	18.0	23.5	18.0	23.5	21.5	24.0	21.5	18.5	17.0
28	13.5	11.0	23.0	17.0	23.5	19.0	25.5	20.5	25.0	20.0	17.0	16.0
29	14.0	12.0	23.5	16.5	22.5	20.0	25.0	19.0	25.0	20.5	17.0	16.5
30	15.5	13.0	20.5	18.0	20.0	18.0	25.5	19.5	24.0	20.5	16.5	13.0
31	---	---	18.0	14.5	---	---	26.5	20.0	24.0	20.0	---	---
MONTH	15.5	1.5	25.0	9.5	25.5	13.5	31.5	17.0	26.5	16.5	25.0	13.0
YEAR	31.5	0.5										

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO

LOCATION.--Lat 41°01'49", long 83°12'56", in sec.23, T.1 N., R.14 E., Seneca County, at right upstream abutment of St. Johns Bridge, on Seneca County Highway 6, 100 ft downstream from dam, 2.5 miles upstream from gaging station, 6.5 miles upstream from Honey Creek, and 4.5 miles northwest of Mexico.

DRAINAGE AREA.--771 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1969 to September 1972.
Water temperatures: June 1969 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,240 micromhos Nov. 23; minimum, 230 micromhos Sept. 14.
Water temperatures: Maximum, 28.5°C July 23, 24; minimum, 0.5°C on many days during January and February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT.								
18...	1230	24	238	0	270	39	1.0	.70
18...	1240	--	--	--	--	--	--	--
27...	1500	30	280	0	310	40	.7	.70
NOV.								
12...	0900	30	310	0	270	43	.7	.30
28...	0500	33	274	0	340	53	.7	.40
DEC.								
08...	1045	106	274	18	330	43	.8	.40
26...	1300	83	184	0	160	36	.4	3.2
JAN.								
02...	1300	982	104	0	77	22	.3	8.6
04...	1000	380	118	0	100	25	.3	9.2
FEB.								
03...	1204	120	218	0	190	36	.4	9.2
14...	1000	111	164	0	130	48	.3	3.3
MAR.								
03...	1230	3800	180	6	150	28	.3	7.8
APR.								
04...	1100	233	210	6	170	27	.4	4.4
19...	0900	2920	104	0	61	12	.2	4.8
MAY								
13...	1300	1060	198	0	180	28	.4	2.3
16...	1730	4200	94	0	53	25	.3	7.3
JUNE								
08...	1040	--	--	--	--	--	--	--
08...	1100	117	196	6	160	27	.4	3.0
28...	1230	80	234	8	170	27	.5	3.9
JULY								
18...	1215	245	212	10	130	29	.4	3.7
27...	1210	86	226	0	160	25	.4	3.1
AUG.								
03...	1330	--	--	--	--	--	--	--
21...	1430	--	--	--	--	--	--	--
23...	1830	134	236	0	250	35	.6	.90
30...	1625	56	188	0	130	26	.4	1.9
SEP.								
08...	1100	36	200	8	160	25	.5	1.6
08...	1140	--	--	--	--	--	--	--
28...	1930	1300	166	0	84	18	.3	4.0

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1971-72): Maximum, 1,240 micromhos Nov. 23, 1971; minimum, 230 micromhos Sept. 14, 1972.
Water temperatures (1971-72): Maximum, 28.5°C July 23, 24, 1972; minimum, 0.5°C on many days during January and February 1972.

REMARKS.--Continuous water-quality recorder operated since June 1969. Minimum recorded specific conductance value of 130 micromhos occurred Feb. 19, 20, 1971. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. Records of discharge are given for Sandusky River near Mexico (station 04197000, drainage area 774 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
10...	3.0	654	460	260	1000	8.1	--	--
10...	--	--	--	--	--	--	<.5	9.0
27...	3.0	740	530	300	1070	7.7	--	--
NOV.								
12...	1.4	714	520	260	1040	7.8	--	--
20...	1.6	798	570	340	1150	8.2	--	--
DEC.								
08...	1.2	812	580	360	1120	8.5	--	--
26...	14	522	380	230	747	7.4	--	--
JAN.								
02...	38	298	200	120	447	7.7	--	--
04...	40	354	240	140	524	7.9	--	--
FEB.								
03...	41	594	410	230	830	7.8	--	--
14...	15	466	290	160	684	8.2	--	--
MAR.								
03...	35	478	340	180	694	8.3	--	--
APR.								
04...	19	530	390	210	752	8.4	--	--
19...	21	252	180	95	368	7.9	--	--
MAY								
13...	10	500	370	210	732	7.4	--	--
16...	32	248	160	83	344	7.8	--	--
JUNE								
08...	--	--	--	--	--	--	--	5.0
08...	13	484	350	180	700	8.4	--	--
20...	17	550	410	200	784	8.4	--	--
JULY								
10...	16	422	340	150	701	8.6	--	--
27...	14	436	360	170	715	8.2	--	--
AUG.								
03...	--	--	--	--	--	--	<.5	--
21...	--	--	--	--	--	--	<.5	--
23...	3.8	580	450	260	895	7.7	--	--
30...	8.2	360	290	140	625	8.2	--	--
SEP.								
08...	7.2	440	350	170	702	8.6	--	--
08...	--	--	--	--	--	--	<.5	--
28...	18	296	250	110	509	7.6	--	--

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	940	900	1040	1010	1130	1100	710	470	780	750	---	---
2	940	910	1040	1010	1130	1100	470	440	800	770	---	---
3	950	920	1040	1010	1140	1130	500	460	910	800	---	---
4	1030	910	1050	1030	1140	1120	560	500	920	875	---	---
5	1010	980	1090	1000	1140	1120	580	560	935	920	---	---
6	1020	990	1020	990	1120	1090	600	580	960	930	---	---
7	1040	1000	1040	1030	1100	1040	620	600	995	960	---	---
8	1030	950	1060	1020	1190	1070	630	610	1020	990	---	---
9	960	890	1050	1030	1140	1080	---	---	990	960	---	---
10	910	900	1040	1020	1080	1040	---	---	960	920	---	---
11	920	910	1040	1020	1080	1050	---	---	920	870	---	---
12	940	920	1050	1010	1070	1030	---	---	880	830	---	---
13	950	940	1030	1010	1030	1010	550	530	910	850	720	500
14	950	940	1030	1000	1020	1000	600	550	880	850	500	410
15	950	940	1020	1000	1050	1020	610	600	910	840	430	410
16	960	940	1060	1020	1050	980	600	590	840	720	470	430
17	980	950	1060	1050	980	880	600	590	720	600	505	470
18	1000	960	1080	1060	910	805	600	580	---	---	525	500
19	960	940	1110	1070	805	780	620	590	---	---	560	510
20	950	910	1120	1090	780	720	630	620	---	---	585	550
21	930	910	1130	1100	720	700	650	630	---	---	620	565
22	940	910	1130	1120	710	700	670	640	---	---	665	530
23	940	920	1240	1120	725	700	640	540	---	---	550	450
24	960	920	1140	1090	755	725	540	490	---	---	450	430
25	1060	960	1130	1110	760	755	560	520	---	---	500	450
26	1090	1060	1130	1120	760	720	600	570	---	---	545	500
27	1080	1040	1140	1130	800	720	630	600	---	---	595	545
28	1050	1000	1150	1140	805	790	660	630	---	---	640	595
29	1030	1010	1140	1110	800	770	680	650	---	---	660	640
30	1030	1000	1130	1110	820	740	740	680	---	---	660	640
31	1030	1010	---	---	810	660	750	740	---	---	680	660
MONTH	1090	890	1240	940	1190	660	750	440	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	720	690	650	615	700	670	720	580	700	670	650	610
2	740	710	660	640	710	700	670	510	700	680	---	---
3	760	740	680	660	700	680	700	585	780	690	---	---
4	765	750	700	680	700	685	640	415	690	665	---	---
5	780	750	720	690	710	680	500	400	710	680	---	---
6	750	735	730	720	690	685	490	445	730	710	---	---
7	760	660	730	710	700	690	570	490	780	730	---	---
8	660	390	720	710	730	650	625	570	780	770	730	700
9	415	370	710	610	660	620	670	625	800	775	740	730
10	460	370	630	590	690	640	670	655	825	800	745	730
11	535	460	610	570	700	670	690	670	835	815	760	740
12	580	535	655	570	700	660	690	670	865	830	800	745
13	600	445	760	655	700	670	720	680	870	845	765	650
14	470	410	810	760	730	690	730	710	865	845	740	230
15	410	350	815	440	720	660	770	730	---	---	430	300
16	---	---	440	344	710	665	795	770	---	---	570	430
17	---	---	---	---	680	660	800	785	---	---	590	540
18	---	---	---	---	690	670	800	720	---	---	590	535
19	415	385	495	460	670	660	720	700	---	---	650	540
20	455	260	530	495	650	640	720	710	---	---	670	650
21	265	250	565	530	665	640	725	715	---	---	670	640
22	250	235	590	565	680	650	730	720	---	---	660	650
23	285	235	620	590	710	680	775	725	900	870	690	660
24	325	285	630	620	720	710	800	770	870	740	720	690
25	410	325	650	630	750	720	790	775	740	600	750	720
26	510	410	680	650	755	740	780	650	600	560	820	750
27	535	510	680	650	755	720	720	645	600	560	820	480
28	560	530	690	675	805	750	650	640	630	580	560	490
29	590	560	700	690	785	730	660	630	655	630	570	550
30	615	590	700	680	790	675	665	640	645	605	570	400
31	---	---	690	680	---	---	670	655	610	590	---	---
MONTH	780	235	815	344	805	620	800	400	---	---	820	230
YEAR	1240	230										

04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.1	7.8	8.5	8.1	---	---	13.1	12.9	13.8	13.7	---	---
2	8.2	8.0	8.5	8.2	---	---	13.7	13.0	13.8	13.7	---	---
3	8.2	8.0	8.8	8.5	---	---	13.8	13.3	15.0	13.7	---	---
4	8.4	8.2	9.3	8.8	---	---	15.0	13.8	15.0	15.0	---	---
5	8.6	8.3	9.6	9.2	---	---	15.0	15.0	15.0	15.0	---	---
6	---	---	---	---	---	---	15.0	15.0	15.0	15.0	---	---
7	8.1	7.4	---	---	---	---	15.0	15.0	15.0	15.0	---	---
8	7.7	7.5	---	---	11.5	10.3	15.0	15.0	15.0	15.0	---	---
9	8.0	7.7	---	---	10.6	10.5	---	---	15.0	15.0	---	---
10	8.1	7.9	---	---	10.5	10.1	---	---	15.0	15.0	---	---
11	8.2	8.0	---	---	10.2	10.0	---	---	15.0	15.0	---	---
12	8.2	7.9	---	---	10.2	10.1	---	---	15.0	15.0	---	---
13	8.3	8.0	---	---	10.6	10.2	14.5	13.8	15.0	15.0	14.0	13.7
14	8.5	8.1	---	---	10.6	10.4	15.0	14.6	15.0	15.0	13.7	13.5
15	8.6	8.3	---	---	10.5	10.3	15.0	15.0	15.0	15.0	13.8	13.6
16	9.1	8.3	---	---	10.9	10.6	15.0	15.0	15.0	15.0	13.8	13.6
17	8.6	8.4	---	---	11.2	10.5	15.0	15.0	15.0	15.0	13.7	13.6
18	8.8	7.4	---	---	11.2	10.7	15.0	15.0	---	---	13.9	13.7
19	8.0	7.2	---	---	11.6	10.8	15.0	14.9	---	---	14.0	13.8
20	7.9	7.3	---	---	11.7	11.0	14.9	14.6	---	---	14.0	13.6
21	7.8	7.4	---	---	11.7	11.0	14.6	14.4	---	---	13.8	13.3
22	7.9	7.7	---	---	12.0	11.2	14.4	14.3	---	---	13.4	13.3
23	8.0	7.9	---	---	11.9	11.1	14.3	14.1	---	---	13.8	13.4
24	8.2	8.0	---	---	11.8	11.4	14.3	13.9	---	---	13.9	13.8
25	8.3	8.2	---	---	12.0	11.4	13.9	13.7	---	---	14.0	13.7
26	8.4	8.1	---	---	11.6	10.9	14.0	13.8	---	---	14.0	13.7
27	8.5	8.2	---	---	12.0	11.5	14.0	13.9	---	---	13.8	13.6
28	8.6	8.1	---	---	13.2	11.8	14.0	13.8	---	---	13.6	13.4
29	8.4	8.1	---	---	13.3	12.8	13.9	13.7	---	---	13.6	13.4
30	8.3	8.2	---	---	13.4	12.7	13.8	13.7	---	---	13.6	13.4
31	8.4	8.2	---	---	13.1	12.6	13.8	13.6	---	---	13.6	13.3
MONTH	9.1	7.2	---	---	---	---	15.0	12.9	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.3	13.1	9.5	9.0	7.7	7.6	11.7	10.1	7.0	5.4	5.2	4.5
2	13.1	12.9	9.0	8.8	7.7	7.6	10.3	10.1	6.3	5.8	4.9	3.8
3	12.9	12.6	8.9	8.8	7.6	7.4	10.6	9.9	6.8	5.8	3.8	3.2
4	12.6	12.3	8.9	8.8	7.4	7.3	10.9	9.8	7.0	6.4	4.9	3.7
5	12.3	12.1	9.5	9.0	7.4	7.2	10.6	9.9	6.6	5.9	5.4	4.6
6	12.1	11.8	9.0	8.9	7.3	7.2	10.6	9.8	6.2	5.4	6.0	5.1
7	12.3	11.9	9.0	8.8	7.3	7.2	10.1	9.9	5.6	4.5	6.0	4.4
8	12.6	12.3	9.0	8.9	11.7	7.3	10.0	9.7	5.8	5.5	7.4	4.6
9	12.5	12.4	11.2	9.1	9.1	8.6	9.8	9.7	6.3	5.7	7.2	6.2
10	12.5	12.1	14.2	9.3	9.5	8.9	9.8	9.6	6.4	5.5	7.4	6.6
11	12.1	11.7	13.5	9.2	9.7	9.2	9.7	9.6	6.0	5.1	7.2	5.9
12	11.8	11.5	9.4	9.0	9.4	9.1	9.5	9.4	5.9	5.4	7.0	5.9
13	11.6	11.2	9.1	8.9	9.1	8.1	9.5	9.4	6.3	5.7	7.7	5.2
14	11.6	11.4	9.3	8.9	8.3	8.2	9.4	9.3	6.5	5.7	8.0	5.8
15	11.7	11.6	10.0	9.1	8.3	7.9	9.5	9.3	---	---	7.0	6.3
16	---	---	12.2	10.0	8.0	6.8	9.5	9.4	---	---	7.0	6.6
17	---	---	---	---	8.6	8.0	9.5	9.3	---	---	6.9	6.4
18	---	---	---	---	8.2	7.8	9.5	6.3	---	---	6.6	6.1
19	13.8	7.9	7.7	7.4	8.1	7.9	6.4	6.3	---	---	6.3	5.9
20	12.7	11.2	7.5	7.3	7.9	6.6	6.5	6.3	---	---	6.3	5.8
21	13.2	11.3	7.4	7.3	7.9	7.6	6.5	6.4	---	---	6.2	5.9
22	13.7	13.2	7.4	7.3	8.1	7.9	6.5	6.3	---	---	6.9	6.2
23	15.0	12.5	7.4	7.2	8.4	8.1	6.5	6.3	7.6	7.0	6.8	6.5
24	15.0	13.3	7.3	7.2	8.4	8.3	6.5	6.3	7.3	5.0	7.1	6.6
25	15.0	13.5	7.3	7.2	8.5	8.3	6.5	6.4	6.9	5.3	7.3	6.7
26	15.0	13.6	7.3	7.1	8.5	8.3	7.7	6.4	6.9	6.2	7.0	6.7
27	15.0	14.1	7.4	7.2	8.8	6.5	7.7	7.1	6.4	5.1	7.7	6.8
28	15.0	14.1	7.4	7.2	11.9	7.6	7.1	6.5	5.9	5.2	8.1	7.7
29	15.0	14.5	7.3	7.3	14.5	11.7	8.4	6.5	6.4	5.3	8.4	8.0
30	15.0	13.6	7.4	7.3	11.7	10.5	8.0	7.0	6.9	5.4	9.2	8.4
31	---	---	7.6	7.4	---	---	7.5	6.6	5.9	5.0	---	---
MONTH	15.0	7.9	14.2	7.1	14.5	6.5	11.7	6.3	---	---	9.2	3.2

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04196990 SANDUSKY RIVER AT ST. JOHNS BRIDGE, NEAR MEXICO, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	19.0	17.0	15.5	3.0	3.0	3.5	3.5	0.5	0.5	---	---
2	20.5	19.5	17.0	16.0	3.0	3.0	3.5	3.0	0.5	0.5	---	---
3	20.5	19.0	16.0	15.0	3.0	3.0	3.0	3.0	0.5	0.5	---	---
4	20.5	18.0	15.0	13.5	3.5	3.0	3.0	1.5	1.0	0.5	---	---
5	18.5	18.5	13.5	11.5	3.5	3.0	1.5	1.0	1.0	0.5	---	---
6	18.5	18.0	11.5	10.5	3.0	3.0	1.0	0.5	1.0	0.5	---	---
7	18.0	17.0	10.5	9.0	3.0	2.5	1.0	0.5	1.0	1.0	---	---
8	17.0	15.5	9.0	8.0	3.5	2.5	1.0	0.5	1.0	1.0	---	---
9	16.0	15.5	8.0	7.0	3.0	2.5	---	---	1.0	1.0	---	---
10	15.5	15.0	7.5	6.5	6.0	3.0	---	---	1.0	1.0	---	---
11	15.0	14.5	7.0	6.5	6.5	6.0	---	---	1.0	1.0	---	---
12	15.0	14.0	7.0	6.5	6.0	5.5	---	---	1.0	1.0	---	---
13	14.5	14.0	7.0	6.5	6.0	5.5	3.0	2.5	1.0	1.0	5.5	5.5
14	15.0	14.5	9.0	7.0	5.5	5.0	2.5	1.0	1.0	1.0	6.0	5.0
15	15.5	14.5	9.0	7.5	6.0	5.0	1.0	0.5	1.0	1.0	5.0	4.5
16	16.0	14.5	9.0	8.0	6.0	5.0	1.0	0.5	1.0	1.0	5.0	4.5
17	16.5	15.0	9.5	8.0	6.0	5.0	0.5	0.5	1.0	1.0	5.0	5.0
18	15.5	15.0	9.5	8.5	5.0	3.5	0.5	0.5	---	---	5.0	4.5
19	17.5	15.5	9.0	8.0	3.5	2.0	1.0	0.5	---	---	5.0	4.5
20	18.0	15.5	8.5	8.0	2.0	2.0	0.5	0.5	---	---	6.0	4.5
21	18.0	16.0	8.0	6.0	2.0	2.0	0.5	0.5	---	---	7.5	5.5
22	17.0	16.5	6.0	5.0	2.0	1.5	0.5	0.5	---	---	8.5	7.0
23	17.5	16.5	5.0	4.0	2.0	1.5	0.5	0.5	---	---	7.0	5.5
24	17.0	16.0	4.0	3.5	2.0	1.5	1.0	0.5	---	---	5.0	4.0
25	16.5	16.0	3.5	3.5	2.0	2.0	1.0	0.5	---	---	4.5	3.5
26	16.5	16.0	3.5	3.0	2.5	2.0	1.0	0.5	---	---	5.0	3.5
27	17.0	15.5	3.5	3.0	4.0	2.5	0.5	0.5	---	---	6.5	5.0
28	18.0	16.5	3.5	3.5	4.0	3.5	0.5	0.5	---	---	7.0	6.5
29	17.5	16.0	3.5	3.0	4.0	3.5	0.5	0.5	---	---	6.5	6.0
30	18.0	16.0	3.0	2.5	4.5	3.5	0.5	0.5	---	---	6.5	5.5
31	16.5	16.0	---	---	4.5	3.5	0.5	0.5	---	---	7.0	5.5
MONTH	21.0	14.0	17.0	2.5	6.5	1.5	3.5	0.5	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	15.5	14.0	17.0	16.0	19.0	18.0	24.0	22.5	23.5	23.0
2	6.5	6.0	17.0	15.5	16.5	15.5	19.0	19.0	26.5	24.0	23.5	22.0
3	7.0	6.0	16.0	17.0	17.0	16.5	20.0	19.0	24.5	23.0	22.0	21.0
4	8.0	6.5	17.0	16.0	19.5	18.0	20.0	18.0	24.5	23.0	21.5	20.5
5	9.5	7.0	16.0	14.5	20.0	19.0	18.0	18.0	24.5	22.0	21.0	20.0
6	11.0	9.5	16.0	15.0	20.5	20.0	18.0	17.0	23.0	22.0	23.0	20.0
7	10.5	6.5	16.0	15.5	20.5	20.0	18.0	16.5	22.0	22.0	22.0	20.0
8	6.5	3.5	15.5	14.5	21.0	20.0	18.5	17.5	22.0	21.5	21.5	20.5
9	4.0	3.0	14.5	10.0	21.0	20.0	19.5	18.5	21.5	20.5	21.5	20.0
10	6.5	3.5	10.5	10.0	20.0	19.0	20.5	19.0	22.5	20.0	22.0	19.5
11	9.5	6.5	12.0	11.0	20.0	18.5	21.0	20.0	21.0	20.0	21.5	20.5
12	12.0	9.5	17.0	12.0	20.0	18.5	23.5	21.0	21.5	20.5	21.5	20.5
13	15.0	12.0	15.0	14.0	19.5	18.5	23.0	22.0	24.5	21.5	21.0	20.0
14	15.0	14.5	15.0	14.5	20.0	18.5	24.0	23.0	23.5	22.5	20.5	19.5
15	15.0	14.5	15.0	14.0	20.5	19.0	24.0	23.5	---	---	19.5	18.5
16	---	---	14.0	14.0	21.0	20.5	24.5	24.0	---	---	18.5	18.0
17	---	---	---	---	20.5	19.0	24.5	21.5	---	---	19.5	18.5
18	---	---	---	---	19.5	18.5	25.0	24.0	---	---	20.0	19.5
19	14.5	14.5	18.0	17.0	19.5	18.5	25.5	24.5	---	---	20.5	20.0
20	14.5	12.0	18.5	17.0	20.5	19.0	26.0	25.0	---	---	20.5	19.5
21	12.0	11.0	18.5	17.0	20.5	19.0	27.0	25.5	---	---	19.5	19.0
22	11.0	10.5	19.0	18.5	19.0	18.0	28.0	26.0	---	---	19.5	18.5
23	11.5	10.5	20.0	19.0	18.0	16.5	28.5	26.5	23.5	23.0	18.5	18.0
24	12.0	11.5	20.0	19.5	17.5	16.0	28.5	27.0	23.5	23.0	18.0	18.0
25	12.0	10.5	20.5	19.5	18.5	15.5	27.0	26.5	23.5	23.0	18.0	18.0
26	11.0	10.5	21.5	20.0	16.0	15.5	26.5	25.5	24.0	23.0	18.0	17.0
27	12.0	10.5	20.5	20.0	18.5	15.5	25.5	24.5	23.5	23.0	18.5	18.0
28	13.0	11.0	20.0	19.5	19.0	16.0	26.5	24.0	23.5	23.0	18.0	16.5
29	13.0	12.0	20.5	19.5	17.0	16.0	24.5	23.0	23.5	23.0	17.0	16.5
30	14.0	13.0	20.5	19.5	19.0	17.0	24.5	23.0	25.0	22.5	16.5	14.5
31	---	---	19.5	17.5	---	---	23.5	23.0	24.0	22.5	---	---
MONTH	15.0	3.0	21.5	10.0	21.0	15.5	28.5	16.5	---	---	23.5	14.5
YEAR	28.5	0.5										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO

LOCATION.--Lat 41°22'12", long 83°06'10", in NW 1/4 sec.26, T.5 N., R.15 E., Sandusky County, on left bank 0.3 mile downstream from U.S. Highway 20 bridge, 0.7 mile downstream from Fremont Sewage plant, 7 miles downstream from gaging station near Fremont, and 4 miles upstream from Muskellunge Creek.

DRAINAGE AREA.--1,264 sq mi.

PERIOD OF RECORD.--Chemical analyses: September 1966 to September 1972.
Water temperatures: September 1966 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,230 micromhos Nov. 25; minimum, 156 micromhos Apr. 26.
pH: Maximum, 11.5 June 28; minimum, 5.8 May 24.
Dissolved oxygen: Maximum, 15.0 mg/l on several days in February, March, and June; minimum, 0.1 mg/l July 21.
Water temperatures: Maximum, 31.0°C July 23; minimum, freezing point on several days during December to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT.									
01...	1130	41	214	0	160	56	.5	1.8	8.1
18...	1415	--	--	--	--	--	--	--	--
26...	1500	47	288	0	230	65	.6	1.6	7.2
NOV.									
01...	1600	41	262	14	240	67	.7	1.5	6.5
24...	1330	45	344	0	250	75	.7	1.6	7.0
DEC.									
04...	1800	53	324	10	260	66	.7	.80	3.6
23...	1400	161	192	0	150	46	.3	2.6	12
JAN.									
05...	1500	520	126	0	87	32	.5	8.5	38
22...	1200	400	180	0	130	41	.5	7.3	32
FEB.									
15...	1600	340	222	18	200	53	.4	4.2	19
23...	1500	280	138	0	91	37	.5	3.9	17
MAR.									
15...	1800	7270	96	0	66	22	.2	11	49
29...	1500	630	166	0	120	29	.2	8.5	38
APR.									
08...	2300	2580	195	8	160	33	.2	4.2	18
22...	1700	13900	121	0	44	10	.2	4.4	19
MAY									
08...	1900	316	224	0	140	28	.3	3.7	16
18...	2100	3650	105	0	56	14	.2	7.1	32
JUNE									
07...	1000	--	--	--	--	--	--	--	--
16...	1700	1500	123	0	78	20	.3	5.2	23
28...	1120	150	183	0	120	39	.3	8.4	37
JULY									
10...	2200	361	140	0	71	20	.2	12	55
19...	1800	376	206	8	110	31	.3	7.7	34
AUG.									
10...	1210	80	176	4	130	39	.4	1.6	7.3
27...	1900	187	208	4	160	40	.5	1.6	7.0
SEP.									
05...	1200	62	196	4	190	52	.6	1.3	5.8
15...	1900	3510	112	0	51	14	.2	3.8	17

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1967-72): Maximum, 1,230 micromhos Nov. 25, 1971; minimum, 156 micromhos Apr. 26, 1972.
pH (1969-72): Maximum, 11.5 June 28, 1972; minimum, 4.8 Apr. 26, 1970.
Dissolved oxygen (1970-72): Maximum, 15.0 mg/l on many days during 1970-72; minimum, 0.0 mg/l Oct. 14, 1970.
Water temperatures: Maximum, 32.5°C Aug. 17, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since September 1966. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Sandusky River near Fremont, Ohio (station 04198000, drainage area 1,251 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
01...	.44	1.3	510	330	150	810	--	--
18...	--	--	--	--	--	--	<.5	11
26...	1.1	3.3	720	460	220	1060	--	--
NOV.								
01...	.54	1.7	734	460	220	1080	--	--
24...	.76	2.3	796	510	230	1170	--	--
DEC.								
04...	.70	2.1	790	520	240	1140	--	--
23...	.14	.44	516	340	180	753	--	--
JAN.								
05...	.080	.25	358	230	130	518	--	--
22...	.20	.63	476	330	180	698	--	--
FEB.								
15...	.38	1.2	676	470	260	946	--	--
23...	.39	1.2	386	240	130	544	--	--
MAR.								
15...	.070	.21	314	200	120	435	--	--
29...	.11	.34	426	300	160	616	--	--
APR.								
08...	.040	.13	516	370	200	748	--	--
22...	.040	.13	234	170	71	313	--	--
MAY								
08...	.11	.35	490	350	170	702	--	--
18...	.16	.49	260	170	84	370	--	--
JUNE								
07...	--	--	--	--	--	--	<.5	11
16...	.22	.68	302	210	110	454	--	--
28...	.36	1.1	472	310	160	690	--	--
JULY								
10...	.30	.92	262	230	120	496	--	--
19...	.34	1.0	396	330	150	667	--	--
AUG.								
10...	.36	1.1	344	290	140	633	--	--
27...	.36	1.1	426	350	170	740	--	--
SEP.								
05...	.47	1.4	506	350	180	800	--	--
15...	.46	1.4	200	160	68	353	--	--

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	818	786	1080	1030	1150	1100	735	699	762	750	646	625
2	842	796	1090	1060	1140	1080	745	556	---	---	---	---
3	835	809	1120	1090	1110	1090	572	546	743	693	567	546
4	833	818	1140	1120	1110	1080	554	533	791	743	555	528
5	853	826	1140	1080	1100	1050	583	544	815	770	---	---
6	865	835	1120	1090	1070	1000	609	583	799	780	523	497
7	887	856	1140	1120	1050	1040	620	534	832	799	542	520
8	913	871	1130	1110	1080	993	602	569	863	832	599	542
9	904	885	1140	1120	1050	1040	641	602	889	854	625	603
10	942	903	1150	1130	1040	1040	671	641	910	874	655	624
11	962	925	1130	1110	1040	1010	684	636	922	894	670	640
12	964	912	1130	1110	1030	991	668	586	926	914	684	648
13	956	918	1130	1100	1010	992	595	545	949	922	702	650
14	956	925	1130	1090	1010	1000	556	545	974	941	650	455
15	970	921	1120	1080	1000	958	604	554	966	940	458	428
16	968	918	1130	1090	961	935	617	599	943	905	457	428
17	940	899	1130	1090	935	830	671	617	905	772	484	457
18	939	918	1130	1110	840	830	707	671	816	779	504	483
19	986	945	1150	1120	840	773	719	704	789	663	516	493
20	1000	944	1150	1130	773	742	719	705	689	649	542	510
21	1010	974	1150	1130	778	754	746	711	649	587	566	542
22	1020	992	1170	1140	789	757	761	737	606	564	638	566
23	1030	984	1170	1160	780	759	758	680	564	545	640	532
24	999	984	1220	1160	774	759	722	687	574	552	541	470
25	1040	999	1230	1210	780	756	689	669	586	572	511	466
26	1050	1040	1220	1190	777	754	689	674	605	582	532	495
27	1060	1030	1190	1180	780	745	725	687	648	596	576	411
28	1060	1010	1180	1170	777	639	750	705	649	625	614	575
29	1070	1010	1170	1150	715	685	723	685	652	624	669	614
30	1070	1010	1150	1140	729	647	754	716	---	---	679	667
31	1070	1050	---	---	699	652	752	735	---	---	692	650
MONTH	1070	786	1230	1030	1150	639	761	533	974	545	702	411

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	719	692	614	370	670	633	633	578	685	667	773	732
2	731	717	630	537	685	646	650	591	689	675	772	753
3	741	702	657	569	681	643	670	622	695	683	788	768
4	753	716	683	623	666	639	640	595	695	680	804	788
5	759	704	690	542	672	598	611	557	710	694	804	781
6	737	707	617	533	652	601	578	419	700	688	794	765
7	759	737	---	---	642	597	484	421	686	674	785	767
8	773	719	704	692	646	587	483	470	678	652	783	774
9	758	426	714	507	638	620	481	467	654	623	796	782
10	432	408	536	405	655	625	507	486	688	627	803	780
11	431	410	471	431	652	611	530	510	699	685	785	776
12	502	431	453	414	611	603	560	539	700	688	777	771
13	569	502	438	404	619	584	596	548	705	678	765	749
14	600	489	458	372	641	602	612	588	715	682	755	650
15	489	438	524	330	661	616	630	611	696	678	658	343
16	438	419	495	369	630	476	636	588	716	681	390	341
17	477	438	405	312	562	514	639	614	730	697	405	390
18	447	366	413	312	584	562	672	639	735	680	458	402
19	438	366	429	339	599	584	674	668	700	637	484	453
20	473	431	450	302	611	594	674	512	701	654	503	484
21	464	326	476	426	618	594	594	515	688	666	535	492
22	342	302	582	570	640	618	638	598	734	699	542	530
23	303	273	603	582	656	640	654	617	750	703	561	542
24	308	267	631	603	669	650	633	612	738	720	591	561
25	347	260	640	613	667	650	624	616	739	702	615	564
26	402	156	642	622	665	645	634	624	704	674	589	577
27	380	241	649	622	674	647	640	630	726	691	625	600
28	420	180	652	589	668	624	643	636	737	717	628	472
29	522	226	636	592	631	597	648	639	751	705	502	474
30	430	271	634	601	641	583	652	640	755	698	544	501
31	---	---	639	604	---	---	666	646	763	735	---	---
MONTH	773	156	714	302	685	476	674	419	763	623	804	341
YEAR	1230	156										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.3	---	---	8.1	8.1	7.9	7.8	7.7	7.6	8.9	8.2
2	7.9	7.4	---	---	8.2	8.1	7.9	7.6	---	---	---	---
3	8.1	7.8	---	---	8.2	8.2	7.7	7.6	7.8	7.6	7.3	7.2
4	8.0	7.7	---	---	8.3	8.1	7.6	7.6	7.7	7.6	7.3	7.2
5	7.7	7.7	---	---	8.2	8.1	7.7	7.6	7.7	7.6	---	---
6	7.7	7.6	---	---	8.2	8.1	7.7	7.7	7.8	7.7	7.7	7.5
7	7.9	7.5	---	---	8.1	8.0	7.8	7.7	7.8	7.6	7.7	7.5
8	7.9	7.4	---	---	8.1	7.8	7.9	7.7	7.8	7.7	7.7	7.6
9	7.9	7.6	8.0	7.7	8.0	7.9	8.3	7.9	7.8	7.6	7.7	7.7
10	7.9	7.6	8.0	7.9	7.9	7.9	8.5	8.1	8.0	7.6	7.8	7.7
11	7.7	7.4	7.9	7.8	8.1	7.9	8.7	7.9	7.6	7.5	7.9	7.8
12	7.9	7.4	8.0	7.9	8.0	7.9	8.1	7.8	7.6	7.1	8.0	7.8
13	7.7	7.4	8.0	7.8	8.0	8.0	8.0	7.7	7.6	7.5	8.0	7.9
14	7.7	7.4	8.0	7.8	8.1	8.0	7.7	7.7	7.6	7.5	7.8	7.5
15	7.6	7.3	7.9	7.7	8.0	7.9	7.7	7.6	7.6	7.5	7.7	7.4
16	8.1	7.4	8.1	7.8	8.0	7.9	7.8	7.7	7.8	7.5	7.5	7.3
17	8.2	7.9	8.1	7.8	7.9	7.9	7.7	7.4	8.4	7.4	7.5	7.4
18	8.2	7.9	7.9	7.9	8.0	7.9	8.4	7.3	8.1	7.7	7.5	7.4
19	8.3	7.9	8.0	7.9	8.0	7.9	8.6	7.3	7.8	7.5	7.5	7.4
20	8.0	7.7	7.9	7.9	7.9	7.8	8.4	7.4	7.6	7.4	7.6	7.4
21	8.1	7.8	7.9	7.9	7.8	7.7	9.1	7.6	7.7	7.4	7.7	7.5
22	8.1	7.7	7.9	7.9	7.8	7.7	7.9	7.7	7.6	7.3	7.9	7.6
23	8.1	7.8	7.9	7.9	7.9	7.8	8.9	7.6	8.4	7.5	7.7	7.6
24	8.1	7.9	8.0	7.9	8.1	7.9	7.7	7.6	7.6	7.4	7.6	7.5
25	8.1	7.9	8.1	8.0	8.6	7.9	7.8	7.6	7.6	7.4	7.5	7.5
26	8.1	7.8	8.2	8.0	8.8	8.2	7.7	7.6	7.6	7.5	7.6	7.5
27	8.1	7.5	8.2	8.1	9.1	8.0	7.7	7.6	7.7	7.6	7.6	7.5
28	8.0	7.6	8.1	8.1	8.6	7.7	7.7	7.6	8.8	7.6	7.7	7.6
29	8.3	7.7	8.1	8.1	7.8	7.7	7.8	7.7	8.7	7.8	8.2	7.7
30	8.6	7.8	8.1	8.1	8.2	7.7	7.7	7.6	---	---	7.8	7.7
31	8.2	8.0	---	---	7.9	7.7	8.0	7.6	---	---	7.8	7.8
MONTH	8.6	7.3	---	---	9.1	7.7	9.1	7.3	8.8	7.1	8.9	7.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.9	7.8	8.0	7.7	8.7	7.9	8.6	8.0	8.3	7.7	8.0	7.5
2	7.9	7.8	8.1	7.9	8.7	8.3	8.5	8.3	8.7	8.2	8.4	7.5
3	8.1	7.8	8.2	7.9	8.7	8.3	8.4	8.1	8.5	8.1	7.7	7.4
4	7.9	7.8	8.2	8.0	8.7	8.1	8.4	7.8	8.4	8.2	7.6	7.4
5	8.4	7.9	8.3	8.1	8.6	7.9	8.1	7.9	8.3	8.2	7.5	7.2
6	8.2	8.1	8.3	8.2	8.4	7.9	8.0	7.8	8.6	8.3	7.6	7.2
7	8.3	8.1	8.3	8.2	8.2	7.6	7.8	7.7	8.5	8.0	7.8	7.4
8	8.4	8.1	8.4	8.2	8.7	6.6	7.8	7.7	8.1	7.9	7.6	7.3
9	8.2	7.7	8.4	7.9	8.6	7.8	7.8	7.7	8.1	7.7	7.4	7.2
10	7.7	7.6	7.9	7.1	8.1	7.7	7.9	7.6	8.0	7.7	7.5	7.2
11	7.6	7.5	7.9	7.7	8.5	7.7	8.1	6.6	8.4	7.7	7.4	7.2
12	7.7	7.6	7.9	7.8	8.6	8.2	8.2	7.8	8.5	8.1	7.4	7.2
13	7.9	7.3	7.8	7.8	8.4	6.7	8.1	7.7	8.5	8.1	7.4	7.2
14	7.8	7.5	7.9	7.7	8.7	7.5	8.4	8.0	8.7	8.1	8.1	7.2
15	7.8	7.3	8.0	7.8	8.8	7.9	8.5	8.1	8.7	8.2	7.9	7.3
16	7.5	7.4	8.0	7.6	8.7	7.6	8.3	8.0	8.6	8.0	7.3	7.3
17	7.5	7.5	7.7	7.5	8.0	7.6	8.3	7.9	8.2	7.8	7.3	7.2
18	7.5	7.4	7.7	7.3	8.3	7.8	8.7	8.1	7.9	7.4	7.3	7.2
19	7.4	7.2	7.8	7.7	9.1	6.4	8.7	8.5	7.7	7.3	7.3	7.2
20	7.6	7.4	7.8	7.7	8.8	8.2	8.1	6.7	7.7	7.2	7.4	7.3
21	7.5	7.4	7.8	7.6	8.8	7.8	7.7	7.3	7.6	7.2	7.5	7.2
22	7.5	7.3	8.0	7.9	7.9	7.7	7.9	7.4	8.0	7.3	7.5	7.3
23	7.5	7.4	8.4	7.6	9.0	7.9	7.9	7.5	7.8	7.4	7.4	7.3
24	7.4	7.4	8.7	5.8	9.5	6.9	7.8	7.5	8.2	7.6	7.4	7.3
25	7.5	7.4	8.6	8.1	10.0	9.5	7.6	7.3	8.3	7.7	7.5	7.4
26	7.6	7.5	8.8	8.3	9.9	8.2	7.8	7.5	8.5	7.9	7.4	7.3
27	7.7	7.6	8.8	8.6	10.1	7.3	7.7	7.5	8.4	7.9	7.7	7.3
28	7.7	7.6	8.7	8.4	11.5	8.4	7.7	7.5	8.1	7.6	7.7	7.5
29	7.8	7.7	8.5	8.0	8.8	8.2	7.7	7.6	8.6	8.0	7.5	7.5
30	7.8	7.7	8.4	8.1	8.7	8.1	8.1	7.7	8.7	7.8	7.6	7.5
31	---	---	8.0	7.6	---	---	8.0	7.8	8.2	7.7	---	---
MONTH	8.4	7.2	8.8	5.8	11.5	6.4	8.7	6.6	8.7	7.2	8.4	7.2
YEAR	11.5	5.8										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.2	2.9	4.2	3.6	10.7	9.9	11.7	11.3	14.8	14.4	15.0	14.8
2	4.2	2.6	5.0	3.9	10.8	10.1	11.8	11.0	---	---	---	---
3	4.5	3.0	5.0	4.1	10.3	9.8	11.6	11.2	15.0	13.5	14.0	13.2
4	3.9	3.2	5.4	4.3	10.5	9.7	11.6	11.2	14.4	13.6	13.5	12.0
5	3.9	3.4	5.0	4.2	11.0	9.7	12.6	11.3	14.1	13.3	---	---
6	4.0	3.2	5.1	4.2	11.2	10.2	13.0	12.5	13.8	13.3	14.8	12.9
7	3.4	2.7	6.2	4.8	10.8	10.1	12.8	12.2	13.8	13.2	14.0	12.5
8	5.1	3.1	5.0	4.2	10.3	8.5	12.4	12.0	13.9	13.4	13.5	13.2
9	4.2	3.8	5.4	4.2	10.5	9.0	12.5	11.9	14.1	13.6	13.6	13.1
10	4.5	3.9	7.4	5.4	9.6	9.3	13.6	11.8	14.2	13.7	13.6	13.0
11	5.8	4.2	6.7	5.7	9.3	8.1	13.7	12.1	14.8	13.6	13.6	12.8
12	6.3	4.9	7.9	6.5	10.2	8.7	12.6	12.1	14.9	14.3	12.8	11.6
13	6.8	5.5	7.7	6.8	10.0	9.6	12.1	11.6	14.6	14.0	12.0	11.4
14	6.9	5.8	8.2	7.1	10.2	9.8	12.4	11.9	14.7	14.1	11.7	11.1
15	6.8	5.9	7.8	6.8	10.2	7.7	12.7	12.3	14.7	13.9	11.5	10.9
16	9.7	5.6	7.4	6.6	8.8	7.4	13.1	12.5	14.8	14.1	11.7	10.9
17	10.4	8.2	7.1	6.0	12.0	8.8	13.3	11.5	15.0	14.2	11.4	10.9
18	10.0	7.6	6.5	5.9	11.9	11.1	11.6	9.8	14.7	14.3	11.7	11.3
19	9.7	6.1	6.2	5.7	11.7	11.5	11.4	11.0	14.7	14.4	11.8	11.1
20	8.1	5.5	5.7	5.0	11.6	10.6	12.2	11.3	15.0	14.3	11.7	11.0
21	8.5	5.3	5.4	4.8	11.8	10.0	12.5	11.8	15.0	14.3	11.7	10.5
22	7.5	5.1	5.0	4.4	12.3	11.8	12.6	11.9	15.0	14.7	10.9	10.4
23	6.9	4.5	4.8	4.3	13.0	12.1	12.9	12.4	15.0	15.0	11.5	10.9
24	7.0	5.5	8.6	4.5	13.1	12.7	14.0	12.8	15.0	15.0	11.9	11.3
25	5.9	3.4	9.4	8.6	13.1	12.3	13.8	13.1	15.0	14.2	13.0	11.2
26	3.4	2.5	10.7	9.2	12.6	12.2	14.0	13.6	14.6	14.1	12.9	11.8
27	2.9	2.1	10.7	9.2	13.2	11.4	14.1	13.6	14.9	14.3	12.4	10.9
28	5.2	2.1	10.7	9.9	12.3	11.5	14.5	13.9	15.0	14.3	11.5	11.1
29	8.1	3.1	10.3	9.9	11.5	10.1	14.8	14.1	15.0	14.4	11.6	10.6
30	7.7	3.9	10.4	9.8	11.2	9.8	14.8	14.2	---	---	11.8	11.4
31	4.9	3.4	---	---	11.5	10.4	14.7	14.3	---	---	11.9	11.5
MONTH	10.4	2.1	10.7	3.6	13.2	7.4	14.8	9.8	15.0	13.2	15.0	10.4

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.9	11.3	9.3	7.5	12.1	8.8	9.6	6.3	7.7	5.0	6.7	2.1
2	11.8	11.3	7.8	6.4	13.0	9.2	8.2	5.9	9.8	6.9	8.3	2.7
3	11.5	10.8	7.1	5.8	12.0	10.2	8.1	5.9	7.9	5.4	4.0	1.7
4	11.2	10.7	7.0	6.1	11.9	10.0	8.6	5.5	7.1	5.7	3.2	1.3
5	12.0	10.8	7.7	6.4	14.3	9.4	7.1	6.5	6.0	4.9	3.1	1.8
6	11.7	10.9	8.5	6.2	13.7	10.9	7.2	6.9	7.7	5.4	6.9	2.0
7	11.4	10.9	6.9	5.7	13.3	8.9	7.3	6.9	7.7	4.7	7.4	3.9
8	12.8	11.3	7.8	6.1	11.7	7.1	7.4	6.4	9.1	4.4	6.4	3.5
9	12.9	11.5	9.1	7.1	10.8	6.7	6.9	6.2	7.3	5.8	4.4	1.8
10	12.3	10.6	9.5	7.9	8.4	5.7	6.8	6.0	6.6	4.2	5.3	2.7
11	11.4	10.3	8.7	8.1	10.4	5.5	7.0	6.0	8.0	4.2	5.1	2.5
12	10.8	9.8	8.4	7.2	10.9	8.3	7.8	6.1	8.2	6.0	4.3	2.3
13	9.9	8.8	7.5	6.7	9.7	5.2	6.8	5.8	8.4	6.1	4.5	3.0
14	10.1	9.7	6.8	5.9	10.0	5.0	7.5	5.8	9.1	6.4	6.5	1.1
15	10.0	8.6	6.3	5.7	9.9	5.5	7.0	5.5	9.6	7.0	8.4	6.1
16	9.2	8.6	6.4	5.7	12.9	8.7	6.7	4.9	8.6	5.5	8.1	7.2
17	9.4	9.0	6.2	5.2	13.2	11.7	7.5	5.5	6.7	3.9	7.4	6.8
18	9.5	8.9	6.1	4.8	12.6	10.6	9.8	6.7	4.9	2.2	7.0	6.0
19	11.5	8.1	5.7	5.1	12.8	9.9	7.2	5.5	5.1	1.8	6.5	5.7
20	11.3	10.8	5.2	4.7	12.4	10.3	.5	6.7	4.9	1.7	6.7	5.9
21	11.6	11.3	5.0	3.3	11.7	6.9	7.4	0.1	5.8	2.0	7.3	5.1
22	11.8	10.1	6.5	6.0	8.4	5.5	7.4	3.1	6.3	1.1	7.0	6.2
23	10.5	10.1	7.6	6.1	12.9	8.0	5.9	3.8	4.5	1.0	6.9	6.3
24	10.6	10.3	8.8	6.2	15.0	12.6	7.1	2.9	5.0	2.2	7.3	6.5
25	10.9	10.0	9.1	6.8	15.0	14.0	5.5	2.2	7.5	3.0	7.3	4.5
26	10.7	10.2	9.5	7.5	15.0	10.5	7.1	4.6	8.1	4.7	7.0	5.5
27	10.7	10.0	10.1	8.9	15.0	9.1	5.6	4.5	6.7	4.1	8.9	5.5
28	10.3	9.8	11.2	9.4	15.0	10.3	5.9	4.3	5.7	1.7	9.7	9.1
29	9.8	9.5	11.3	8.8	14.5	10.1	6.9	5.1	8.9	4.3	9.7	9.3
30	9.9	9.0	10.3	8.2	13.1	7.4	8.8	6.4	9.1	3.5	10.2	9.7
31	---	---	8.7	6.7	---	---	7.8	6.5	8.1	4.3	---	---
MONTH	12.9	8.1	11.3	3.3	15.0	5.0	9.8	0.1	9.8	1.0	10.2	1.1
YEAR	15.0	0.1										

04198005 SANDUSKY RIVER BELOW FREMONT, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	21.5	17.5	16.0	4.0	2.5	3.0	1.5	1.0	0.5	2.5	2.0
2	24.0	21.5	17.0	16.0	3.5	2.0	4.0	2.5	---	---	---	---
3	23.5	22.5	16.0	14.0	3.0	2.5	3.5	2.5	1.0	0.5	3.5	2.5
4	22.5	21.5	14.0	12.5	3.0	2.0	3.5	2.0	0.5	0.0	2.5	1.0
5	21.5	20.5	13.5	12.0	3.0	2.0	2.0	0.5	1.0	0.0	---	---
6	21.0	19.5	13.0	11.0	3.5	3.0	0.5	0.0	1.0	1.0	1.0	0.0
7	19.5	18.0	11.0	9.0	4.0	3.5	0.5	0.0	1.0	0.5	3.5	0.5
8	18.0	17.0	9.0	8.0	5.5	4.0	1.0	0.0	1.0	0.5	2.5	1.5
9	17.5	16.5	8.0	7.5	6.0	5.0	1.0	0.5	1.0	0.5	1.5	1.0
10	16.5	15.5	7.5	6.5	8.5	5.5	1.5	0.5	1.5	0.5	1.5	0.5
11	16.0	14.5	8.0	7.0	10.0	8.5	2.0	0.5	1.0	0.5	3.0	0.5
12	15.5	14.0	7.0	6.5	8.5	7.5	1.5	0.5	1.5	1.0	4.5	3.0
13	15.0	14.0	7.5	6.5	7.5	6.0	2.5	1.5	1.5	1.0	4.5	4.0
14	15.0	13.5	8.5	7.0	6.0	5.0	1.5	0.5	1.5	1.0	5.0	4.0
15	14.5	14.0	10.5	8.5	8.0	5.0	0.5	0.0	1.5	1.0	5.0	5.0
16	16.5	14.5	11.0	9.0	8.5	6.5	0.0	0.0	1.5	1.0	5.5	5.0
17	17.0	16.0	11.5	10.0	6.5	3.0	1.0	0.0	1.5	1.0	5.5	5.5
18	18.0	17.0	11.5	10.5	3.0	1.5	1.0	0.5	1.0	0.5	5.5	5.0
19	18.0	16.5	11.5	10.0	1.5	1.0	1.0	0.5	0.5	0.5	7.0	4.5
20	18.5	17.0	10.0	9.0	2.0	1.0	1.0	0.5	1.0	0.5	7.5	5.0
21	19.0	17.5	9.0	7.5	3.0	2.0	1.0	0.5	1.0	0.5	9.5	6.0
22	18.5	17.5	7.5	6.5	3.0	1.5	1.5	0.5	1.0	0.5	9.5	7.0
23	16.5	17.5	6.5	5.5	2.0	0.0	1.0	0.5	1.0	0.5	7.0	5.0
24	18.0	17.5	5.5	4.5	3.0	2.0	0.5	0.0	1.0	0.5	6.0	4.5
25	17.5	17.5	4.5	3.5	3.5	2.0	0.5	0.0	1.0	1.0	6.0	4.0
26	17.5	17.0	4.0	2.5	3.5	3.0	0.5	0.0	1.5	1.0	7.0	3.5
27	18.0	17.0	3.5	3.0	5.5	3.5	0.5	0.0	1.0	0.5	8.0	5.5
28	18.0	16.5	4.0	3.5	5.5	4.5	0.5	0.0	1.5	1.0	7.5	6.5
29	18.0	16.5	3.5	3.5	5.0	4.5	0.0	0.0	2.0	1.0	7.5	5.5
30	18.0	16.5	4.0	3.0	5.0	4.0	0.5	0.0	---	---	6.0	5.0
31	17.5	16.5	---	---	5.0	2.0	0.5	0.5	---	---	7.5	5.0
MONTH	24.0	13.5	17.5	2.5	10.0	0.0	4.0	0.0	2.0	0.0	9.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.5	18.0	15.0	17.0	15.5	23.5	20.0	25.5	24.5	25.0	24.5
2	7.5	6.0	20.0	17.5	19.0	16.0	23.0	21.5	26.0	25.0	25.5	24.0
3	8.5	7.0	19.5	17.0	20.0	18.5	21.5	21.5	25.5	24.5	24.0	23.0
4	10.5	7.5	18.5	16.5	22.5	20.0	22.0	21.0	25.0	24.0	23.0	22.0
5	10.0	8.5	19.5	16.0	24.5	20.5	21.5	19.0	24.5	23.5	22.5	19.5
6	11.5	9.5	19.0	17.0	24.0	20.5	20.5	18.0	24.5	23.5	22.5	21.0
7	9.5	6.5	19.5	17.0	23.0	21.5	20.0	18.5	24.0	22.5	22.5	21.0
8	6.5	4.0	17.5	14.5	24.0	21.5	20.5	19.5	22.5	21.5	22.5	22.0
9	6.0	4.5	14.5	10.0	23.0	21.5	22.0	20.5	21.5	20.5	22.5	21.0
10	8.0	4.5	12.0	9.5	21.5	20.5	23.0	21.0	20.5	19.5	22.5	20.5
11	9.0	5.5	14.0	10.5	20.5	19.0	24.5	22.0	21.5	19.5	22.0	21.0
12	10.5	7.0	16.0	13.0	20.0	19.0	27.5	23.5	21.5	20.5	22.0	21.5
13	15.0	8.5	16.5	14.5	22.0	19.0	26.5	24.5	23.0	21.0	22.5	21.5
14	13.5	12.0	18.0	15.5	24.5	20.5	27.0	25.0	24.0	22.0	23.0	22.0
15	14.5	12.5	18.5	17.0	24.0	22.5	26.5	25.0	25.5	23.0	22.5	19.5
16	14.0	13.0	17.0	15.5	23.5	20.5	26.0	24.5	24.5	23.5	20.5	19.0
17	13.5	11.5	18.5	15.5	20.0	16.5	25.5	24.0	24.5	23.0	22.0	19.0
18	13.5	11.0	20.5	17.0	21.5	18.5	27.0	24.5	25.0	24.0	22.0	20.5
19	14.0	12.5	22.0	19.0	21.5	19.5	27.0	26.5	26.5	24.0	22.5	21.5
20	14.0	11.0	24.5	20.0	23.5	21.5	27.5	27.0	26.0	24.0	21.5	20.5
21	11.5	10.0	26.5	21.0	23.0	20.5	27.5	27.0	26.0	24.0	21.5	20.5
22	10.5	10.0	21.5	20.0	20.5	18.0	30.5	27.5	25.0	24.0	21.0	20.0
23	11.5	9.5	24.0	19.0	17.5	15.0	31.0	29.0	25.5	24.0	20.0	19.0
24	11.5	10.5	25.0	21.5	16.0	15.0	30.0	29.0	25.0	24.0	19.5	18.5
25	12.5	10.0	24.5	23.0	16.5	15.0	29.0	27.5	26.0	24.0	20.0	17.0
26	12.5	10.0	24.0	22.0	17.5	16.0	28.5	26.5	26.5	25.5	21.0	19.5
27	14.0	10.5	23.0	21.5	18.5	16.5	26.5	25.0	26.0	24.5	21.0	19.5
28	15.0	11.5	23.5	21.0	21.5	18.0	25.5	24.0	24.5	24.0	19.5	17.0
29	14.0	13.0	23.5	21.5	22.5	21.0	25.5	24.0	24.5	23.5	17.5	17.0
30	15.5	13.0	22.5	21.5	22.0	20.0	26.0	24.0	25.0	24.0	17.0	15.0
31	---	---	21.5	17.0	---	---	25.5	24.5	25.0	24.0	---	---
MONTH	15.5	4.0	26.5	9.5	24.5	15.0	31.0	18.0	26.5	19.5	25.5	15.0
YEAR	31.0	0.0										

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO

LOCATION.--Lat 41°05'28", long 82°39'04", in T.2 N., R.23 W., Huron County, on left bank at downstream abutment of bridge on Maple Ridge Road, 4.5 miles northeast of Willard, and 2.0 miles downstream from Walnut Creek.

DRAINAGE AREA.--86 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1968 to September 1972.
Water temperatures: December 1968 to September 1972.

EXTREMES.--Period of record:
Specific conductance (1968-69, 1970-71): Maximum, 1,620 micromhos Apr. 24, 1969; minimum, 140 micromhos July 5, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	PH (UNITS)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)
OCT.							
12...	1110	--	--	--	--	--	--
26...	1630	8.1	0	200	31	.2	.20
NOV.							
01...	1430	8.5	10	150	33	.2	.40
08...	1800	8.5	16	210	34	.2	.30
DEC.							
03...	1430	7.9	0	190	60	.2	.40
07...	1700	7.9	0	160	51	.2	1.3
JAN.							
06...	1230	8.1	0	240	54	.3	8.4
10...	1630	7.7	0	130	32	.4	14
FEB.							
09...	1130	8.6	20	250	43	.2	2.1
16...	1700	8.1	0	82	32	.1	3.8
MAR.							
08...	1045	8.3	4	180	28	.2	4.6
13...	1430	7.0	0	79	20	.2	9.8
APR.							
03...	1630	8.3	2	200	26	.2	2.9
22...	1620	7.7	0	77	12	.2	5.1
MAY							
10...	1545	8.1	0	130	18	.2	4.6
2[illegible]...	2115	8.1	0	230	33	.2	.80
JUNE							
06...	1850	--	--	--	--	--	--
14...	1806	8.0	0	100	17	.2	9.3
22...	1625	8.2	0	210	29	.2	2.6
JULY							
20...	1745	8.4	6	140	23	.3	2.6
31...	1710	8.2	0	230	32	.2	.50
AUG.							
07...	1625	8.2	0	240	32	.3	.40
24...	1130	8.5	8	150	20	.3	1.4
SEP.							
12...	1130	8.1	0	220	88	.3	.50
13...	1620	7.1	0	99	20	.2	2.3

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO--Continued

EXTREMES.--Period of record--Continued
Water temperatures (1968-69, 1970-71): Maximum, 31.5°C June 28, 1971; minimum, freezing point on many days during December 1968 to February 1969.

REMARKS.--Continuous water-quality recorder operated since December 1968. Maximum recorded specific conductance value of 1,660 micromhos occurred on June 8, 1972. Minimum recorded specific conductance value of 109 micromhos occurred Aug. 17, 1972. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
12...	--	--	--	--	--	<.5	13
26...	.7	596	430	190	912	--	--
NOV.							
01...	1.5	512	360	140	773	--	--
08...	1.2	646	470	190	943	--	--
DEC.							
03...	1.6	646	460	200	968	--	--
07...	5.8	542	370	180	814	--	--
JAN.							
06...	37	658	470	310	912	--	--
10...	62	392	260	200	569	--	--
FEB.							
09...	9.2	722	520	280	997	--	--
16...	17	310	200	120	459	--	--
MAR.							
08...	20	484	360	210	733	--	--
13...	44	268	200	130	408	--	--
APR.							
03...	13	516	400	230	764	--	--
22...	22	214	160	100	344	--	--
MAY							
10...	20	348	250	140	528	--	--
28...	3.7	532	410	230	893	--	--
JUNE							
06...	--	--	--	--	--	<.5	8.0
14...	41	332	230	150	484	--	--
22...	11	492	350	220	834	--	--
JULY							
20...	11	434	330	160	645	--	--
31...	2.4	508	350	240	851	--	--
AUG.							
07...	1.7	496	360	250	909	--	--
24...	6.1	454	340	150	665	--	--
SEP.							
12...	2.2	684	480	260	1050	--	--
13...	10	300	220	110	480	--	--

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	861	828	895	818	963	877	---	---	949	852	636	471
2	931	848	818	787	---	---	---	---	895	703	471	372
3	923	885	---	---	---	---	---	---	751	544	513	366
4	947	923	---	---	---	---	---	---	921	751	564	472
5	---	---	---	---	---	---	---	---	815	757	636	526
6	---	---	---	---	---	---	996	914	870	751	610	589
7	969	848	---	---	---	---	980	947	929	870	550	423
8	969	848	---	---	---	---	947	926	969	929	794	513
9	918	830	934	877	---	---	926	618	1010	966	843	665
10	848	807	982	895	---	---	653	562	1020	958	924	770
11	864	800	998	941	---	---	740	641	1010	942	936	687
12	900	805	991	923	---	---	788	740	972	788	746	631
13	960	783	998	931	---	---	842	775	792	742	608	412
14	843	798	995	923	---	---	887	796	819	634	548	428
15	843	828	991	931	---	---	1040	855	601	375	631	551
16	864	828	982	928	---	---	1150	1040	554	394	628	525
17	941	864	956	918	---	---	1120	1090	719	574	612	525
18	910	877	963	921	---	---	1120	1020	872	627	663	601
19	960	874	934	874	---	---	1030	848	1290	907	701	653
20	892	874	944	900	---	---	848	776	1350	1270	715	652
21	979	890	976	892	---	---	826	741	1280	664	700	621
22	956	895	937	910	---	---	763	646	1010	688	641	487
23	913	885	972	916	---	---	599	469	1090	985	711	514
24	887	856	991	966	---	---	550	453	985	899	759	711
25	895	859	1000	976	---	---	828	545	1040	936	806	754
26	931	895	1030	972	---	---	809	677	1130	917	809	686
27	926	882	1010	956	---	---	839	792	1200	986	742	706
28	910	882	---	731	---	---	822	807	1030	690	799	742
29	916	885	1020	913	---	---	976	785	789	652	800	757
30	947	879	972	918	---	---	792	736	---	---	780	755
31	1030	887	---	---	---	---	988	762	---	---	822	738
MONTH	1030	783	---	731	---	---	1150	453	1350	375	936	366

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	819	776	744	656	---	---	656	465	916	831	897	868
2	830	784	733	658	---	---	744	656	1000	832	930	876
3	830	723	761	724	---	---	785	669	939	881	930	892
4	786	733	---	---	---	---	778	643	978	886	915	884
5	764	692	---	---	---	---	796	681	948	888	933	884
6	768	691	---	---	757	720	815	726	1020	885	1010	905
7	863	761	---	---	791	724	836	785	1030	941	923	853
8	823	777	---	---	1660	772	827	745	1050	896	907	879
9	819	674	---	---	1420	895	825	715	936	800	936	897
10	725	705	---	---	1550	982	826	732	956	793	936	894
11	---	---	---	---	1420	848	856	752	1070	784	943	907
12	---	---	---	---	1420	793	873	781	816	785	1090	948
13	---	---	---	---	926	282	898	657	821	769	1020	466
14	538	491	---	---	1270	449	737	488	807	771	468	289
15	603	538	---	---	1120	638	712	601	855	804	531	367
16	601	437	---	---	742	475	721	607	883	841	600	531
17	487	392	---	---	698	595	752	661	859	109	698	595
18	586	482	---	---	778	683	856	755	325	225	758	678
19	641	586	---	---	846	761	817	395	453	325	738	714
20	629	274	---	---	882	810	654	469	556	451	784	711
21	522	348	---	---	872	846	728	654	663	442	800	748
22	505	322	---	---	851	830	814	708	752	663	858	782
23	525	385	---	---	851	731	837	796	906	420	856	827
24	591	525	---	---	748	678	813	577	736	604	859	814
25	634	591	---	---	711	689	719	613	811	736	872	838
26	705	621	---	---	724	663	761	682	832	759	862	542
27	701	669	---	---	707	669	784	703	871	820	561	349
28	759	683	---	---	729	689	748	706	910	868	510	398
29	748	698	---	---	737	308	758	661	930	832	629	522
30	752	676	---	---	577	362	933	712	899	835	576	300
31	---	---	---	---	---	---	1030	923	892	843	---	---
MONTH	863	274	---	---	1660	282	1030	395	1070	109	1090	289

04198018 WEST BRANCH HURON RIVER NEAR WILLARD, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	17.5	15.5	12.0	3.5	2.5	---	---	1.5	1.0	7.5	0.0
2	23.0	18.0	15.5	14.5	---	---	---	---	1.5	1.0	7.0	1.5
3	23.0	19.0	---	---	---	---	---	---	2.5	1.5	1.5	0.0
4	22.0	20.0	---	---	---	---	---	---	2.5	2.0	1.5	0.0
5	---	---	---	---	---	---	---	---	2.0	2.0	1.5	0.0
6	---	---	---	---	---	---	0.5	0.5	2.0	1.0	1.0	0.5
7	15.0	12.5	---	---	---	---	0.5	0.5	2.0	1.5	5.0	0.5
8	15.0	10.0	---	---	---	---	1.0	0.0	2.5	1.5	5.0	1.5
9	14.0	12.5	4.0	3.0	---	---	0.5	0.0	2.5	0.0	4.5	2.5
10	12.5	11.0	7.5	3.5	---	---	3.0	0.0	0.0	0.0	4.0	2.5
11	13.5	10.0	7.5	3.5	---	---	3.0	2.0	0.0	0.0	7.0	3.0
12	13.5	9.0	8.0	5.0	---	---	2.5	1.5	0.0	0.0	8.5	6.5
13	14.0	9.0	9.5	6.0	---	---	4.5	1.5	0.0	0.0	8.5	6.0
14	15.5	12.0	12.0	6.0	---	---	1.0	0.0	0.0	0.0	8.5	5.5
15	16.0	11.0	13.5	9.5	---	---	0.0	0.0	0.0	0.0	6.5	5.0
16	16.5	13.5	11.0	8.0	---	---	0.5	0.0	0.0	0.0	7.5	6.0
17	17.5	14.5	11.5	7.5	---	---	0.0	0.0	0.0	0.0	7.0	6.0
18	18.0	14.0	12.0	8.5	---	---	0.0	0.0	0.0	0.0	6.0	5.0
19	17.5	12.5	12.0	7.5	---	---	1.0	0.0	0.5	0.0	7.5	3.5
20	18.0	12.0	7.5	6.0	---	---	1.0	0.5	0.5	0.5	8.5	6.0
21	19.0	14.0	6.0	3.5	---	---	0.5	0.5	0.5	0.0	11.5	8.0
22	17.0	15.5	4.0	1.0	---	---	1.5	0.5	0.5	0.0	11.5	6.0
23	17.0	16.0	3.5	0.5	---	---	3.5	1.5	0.5	0.0	6.0	4.0
24	16.0	15.5	4.0	2.5	---	---	11.0	3.5	0.5	0.0	5.5	3.0
25	15.5	14.0	5.0	3.5	---	---	9.5	1.0	0.5	0.0	5.5	3.0
26	16.5	13.0	4.5	2.5	---	---	3.0	1.5	0.5	0.0	8.0	3.5
27	17.0	13.0	5.5	3.5	---	---	2.0	1.5	1.0	0.5	10.5	7.0
28	17.5	13.0	6.5	4.0	---	---	1.5	1.5	0.5	0.0	9.0	6.5
29	16.5	11.0	6.5	4.0	---	---	3.5	1.5	0.5	0.0	7.0	6.0
30	15.5	10.5	6.0	3.5	---	---	1.5	1.0	---	---	7.5	5.5
31	16.0	13.5	---	---	---	---	1.5	1.0	---	---	9.0	4.5
MONTH	23.0	9.0	15.5	0.5	---	---	11.0	0.0	2.5	0.0	11.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.5	19.5	14.0	---	---	24.5	17.0	24.5	18.0	25.0	20.5
2	7.0	5.5	20.5	15.0	---	---	23.5	21.0	22.5	20.0	23.0	20.0
3	9.5	4.5	16.5	14.0	---	---	21.0	18.5	24.0	20.5	20.0	18.0
4	11.5	7.5	---	---	---	---	21.0	18.0	23.0	18.5	---	---
5	12.0	6.5	---	---	---	---	20.5	17.0	22.0	15.0	---	---
6	14.0	8.0	---	---	20.5	17.5	19.0	16.0	20.0	16.5	---	---
7	9.5	3.0	---	---	23.0	15.0	20.5	19.5	21.0	17.5	---	---
8	5.5	1.5	---	---	27.5	16.5	21.5	18.5	19.5	17.5	---	---
9	9.0	2.5	---	---	26.0	15.5	22.5	20.0	18.5	15.0	---	---
10	8.0	7.0	---	---	25.5	15.5	24.0	21.5	21.5	13.5	---	---
11	---	---	---	---	24.0	14.5	26.5	22.5	22.0	16.0	---	---
12	---	---	---	---	23.5	18.0	26.5	22.5	21.5	17.0	---	---
13	---	---	---	---	22.5	13.5	24.5	22.5	24.0	17.5	---	---
14	13.5	13.0	---	---	26.5	17.0	24.5	21.0	24.0	18.0	---	---
15	16.0	12.5	---	---	24.5	13.5	24.5	22.0	25.0	20.0	---	---
16	15.0	11.5	---	---	25.0	12.5	23.5	21.0	23.0	17.5	---	---
17	13.5	9.0	---	---	18.5	15.0	25.0	21.5	21.5	18.5	---	---
18	15.5	10.5	---	---	19.5	14.5	27.5	22.0	22.5	19.5	---	---
19	14.5	12.5	---	---	22.5	17.5	25.0	23.0	22.0	20.0	---	---
20	14.5	8.5	---	---	23.5	20.5	28.0	24.0	22.0	18.5	---	---
21	8.5	7.0	---	---	21.0	16.0	30.5	24.5	23.0	17.5	---	---
22	10.5	8.0	---	---	15.5	12.5	29.0	24.5	23.0	20.5	---	---
23	12.5	9.0	---	---	12.5	11.5	31.0	24.5	22.0	19.0	---	---
24	10.0	7.0	---	---	13.5	12.0	28.5	24.0	24.5	20.0	---	---
25	9.5	5.0	---	---	18.0	13.5	26.5	21.5	26.5	22.0	---	---
26	11.5	6.0	---	---	17.5	16.0	23.0	19.0	26.5	23.0	---	---
27	13.5	8.0	---	---	23.0	16.0	21.5	19.0	24.0	21.5	---	---
28	14.5	8.0	---	---	22.5	18.5	24.0	17.5	24.5	20.5	---	---
29	13.5	11.0	---	---	20.5	17.5	25.0	16.5	24.5	19.5	---	---
30	17.5	11.5	---	---	18.0	17.0	23.5	16.5	24.0	18.5	---	---
31	---	---	---	---	---	---	26.0	18.0	24.5	18.5	---	---
MONTH	17.5	1.5	---	---	27.5	11.5	31.0	16.0	26.5	13.5	---	---

04199100 HURON RIVER BELOW MILAN, OHIO

LOCATION.--Lat 41°20'06", long 82°34'38", in SW 1/4 sec. 2, T.5 N., R.22 W., Erie County, on right bank at downstream side of bridge on Mason Road, 3.5 miles northeast of Milan, and 4.2 miles downstream from the gaging station at Milan.

DRAINAGE AREA.--385 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1972.
Water temperatures: June 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,170 micromhos Feb. 14; minimum, 189 micromhos Aug. 18.
pH: Maximum, 9.0 Oct. 5, 6; minimum, 4.3 Dec. 10.
Dissolved oxygen: Maximum, 15.0 mg/l on many days during October, December to April, July; minimum, 4.1 mg/l Oct. 16.
Water temperatures: Maximum, 30.0°C July 23; minimum, freezing point on many days during February and March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.									
12...	1210	19	216	0	170	72	.4	1.7	7.5
12...	1220	--	--	--	--	--	--	--	--
18...	1600	14	194	8	170	40	.3	1.0	4.3
NOV.									
02...	1300	26	250	0	190	56	.2	1.5	6.4
24...	1800	20	254	12	190	66	.2	.50	2.2
DEC.									
07...	1210	60	248	18	210	73	.2	.60	2.9
15...	1600	282	186	0	190	53	.2	2.4	10
JAN.									
11...	1510	619	94	0	110	36	.3	8.7	38
18...	1200	65	184	0	210	58	.4	7.7	34
FEB.									
09...	1300	32	218	0	220	61	.3	3.2	14
18...	0800	260	104	0	98	35	.2	3.6	16
MAR.									
11...	1800	218	168	0	160	36	.3	5.5	24
14...	1200	3636	72	0	73	24	.3	8.0	35
APR.									
04...	1000	156	180	0	180	35	.2	4.2	18
18...	1800	634	113	0	100	26	.2	7.3	32
MAY									
09...	1800	2510	94	0	89	20	.2	7.3	32
26...	2100	62	186	2	180	34	.2	2.8	12
JUNE									
06...	1730	--	--	--	--	--	--	--	--
13...	1950	2300	74	0	70	15	.3	9.2	41
27...	2200	290	180	4	140	32	.2	9.2	41
JULY									
07...	1330	119	202	0	140	36	.3	7.6	34
19...	1800	1740	86	0	45	12	.2	3.6	16
AUG.									
17...	1800	577	192	8	190	39	.3	1.2	5.4
23...	2100	571	108	0	76	15	.2	3.7	16
SEP.									
12...	1300	44	238	0	200	40	.3	1.1	5.0
18...	1620	1100	116	0	77	19	.2	4.6	20

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

EXTREMES.--Continued
Period of record:
Specific conductance (1971-72): Maximum, 1,170 micromhos Feb. 14, 1972; minimum, 189 micromhos Aug. 18, 1972.
pH (1971-72): Maximum, 9.0 Oct. 5, 6, 1971; minimum, 4.3 Dec. 10, 1971.
Dissolved oxygen (1971-72): 15.0 mg/l on several days during 1971 and 1972; minimum, 4.1 mg/l Oct. 16, 1971.
Water temperatures (1971-72): Maximum, 30.0°C July 23, 1972; minimum, freezing point on many days during winter period.

REMARKS.--Continuous water-quality recorder operated since June 1968. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Records of discharge are given for Huron River at Milan, Ohio (station 04199000, drainage area 371 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
12...	1.1	3.4	552	340	160	885	--	--
12...	--	--	--	--	--	--	<.5	7.0
18...	.48	1.5	492	340	170	778	--	--
NOV.								
02...	.52	1.6	604	370	160	897	--	--
24...	.81	2.5	608	400	170	853	--	--
DEC.								
07...	.54	1.6	646	430	200	894	--	--
15...	.16	.49	550	360	210	793	--	--
JAN.								
11...	.050	.15	392	240	160	547	--	--
18...	.24	.73	638	420	270	870	--	--
FEB.								
09...	.46	1.4	708	450	270	950	--	--
18...	.29	.89	338	210	120	509	--	--
MAR.								
11...	.20	.63	490	340	200	716	--	--
14...	.54	1.6	268	180	120	403	--	--
APR.								
04...	.080	.26	494	360	210	743	--	--
18...	.060	.17	310	230	140	483	--	--
MAY								
09...	.10	.29	266	190	110	431	--	--
26...	.070	.21	470	350	190	730	--	--
JUNE								
06...	--	--	--	--	--	--	<.5	10
13...	.13	4.1	232	160	100	377	--	--
27...	.050	.15	442	330	180	691	--	--
JULY								
07...	.28	.88	456	340	170	697	--	--
19...	1.1	3.3	186	130	60	288	--	--
AUG.								
17...	.32	1.0	482	360	190	774	--	--
23...	.28	.86	228	180	92	379	--	--
SEP.								
12...	.39	1.2	508	390	190	815	--	--
18...	.39	1.2	244	190	95	420	--	--

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	945	870	897	891	880	838	598	496	869	839	742	682
2	882	834	906	892	880	832	626	598	882	858	684	432
3	840	795	898	881	839	830	675	626	868	844	438	339
4	804	783	884	866	884	839	713	675	869	767	536	438
5	793	784	873	864	935	878	798	713	873	807	605	536
6	821	788	878	869	945	927	846	786	894	858	655	604
7	861	795	873	867	927	834	888	849	913	898	679	640
8	910	853	887	866	846	750	861	834	929	902	717	679
9	923	881	---	---	839	812	900	861	1010	927	744	705
10	927	912	890	881	846	818	891	462	952	931	774	738
11	925	895	886	883	832	739	495	453	958	948	780	717
12	908	825	885	876	855	828	570	501	970	937	777	732
13	864	771	878	869	880	855	648	570	991	934	747	348
14	834	768	877	871	882	870	708	648	1170	991	454	324
15	867	825	879	876	883	682	770	695	1160	804	492	390
16	843	759	887	875	680	635	861	762	783	501	540	492
17	780	741	898	883	710	644	869	788	552	486	510	486
18	759	741	897	894	747	705	870	846	521	497	504	486
19	792	756	896	887	774	741	869	836	585	513	---	---
20	825	789	892	832	784	766	855	837	632	578	---	---
21	849	825	900	891	817	778	845	824	663	624	---	---
22	849	840	899	896	821	812	829	700	654	636	---	---
23	843	840	898	877	838	821	700	408	690	639	---	---
24	846	840	877	850	881	851	580	472	734	689	---	---
25	864	846	886	859	891	858	660	567	764	728	600	585
26	888	864	907	886	890	869	692	632	758	743	639	600
27	891	873	922	898	873	870	729	684	776	758	669	639
28	882	870	922	913	886	873	752	722	799	776	690	669
29	876	867	919	901	906	886	780	741	793	742	708	690
30	882	873	901	841	919	739	851	776	---	---	729	708
31	894	882	---	---	779	494	849	834	---	---	747	726
MONTH	945	741	922	832	945	494	900	408	1170	486	780	324

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	756	741	699	672	747	726	505	454	650	626	717	681
2	765	747	684	651	756	741	570	505	668	644	741	714
3	766	756	681	642	777	750	629	570	667	658	771	741
4	774	756	684	648	786	729	658	629	681	657	777	768
5	777	750	687	660	837	483	706	652	719	674	795	780
6	771	738	714	667	520	468	712	706	726	711	792	774
7	759	735	735	714	576	507	706	690	719	701	792	774
8	768	732	761	732	622	562	704	692	724	700	798	792
9	810	756	791	416	655	622	715	691	728	668	813	798
10	---	---	513	417	699	654	708	687	720	669	825	810
11	726	708	562	508	732	699	701	620	813	703	873	825
12	708	687	620	560	743	731	643	619	822	810	894	870
13	723	675	660	615	752	266	678	378	825	822	854	836
14	723	624	673	634	441	288	617	389	---	---	852	258
15	597	471	634	417	529	436	638	605	---	---	350	260
16	561	480	481	418	560	467	622	538	---	---	458	350
17	480	417	530	467	513	447	582	531	864	198	512	332
18	495	429	591	528	601	513	674	582	321	189	420	368
19	567	498	628	586	650	599	723	288	393	324	502	370
20	594	393	656	611	693	645	529	328	474	393	580	502
21	396	294	669	639	726	693	551	506	537	474	618	580
22	438	285	669	636	750	720	564	534	576	537	---	---
23	408	288	681	657	750	582	573	546	543	318	---	---
24	516	408	699	663	672	585	601	553	696	480	---	---
25	576	516	720	681	711	672	626	587	633	372	---	---
26	618	576	738	714	711	660	698	626	---	---	---	---
27	648	618	738	720	696	660	710	698	657	489	---	---
28	672	648	750	732	710	671	704	665	546	474	402	400
29	687	672	762	744	676	484	668	650	594	546	676	402
30	696	678	762	753	567	393	653	629	642	594	---	---
31	---	---	762	690	---	---	650	629	678	642	---	---
MONTH	810	285	791	416	837	266	723	288	864	189	---	---
YEAR	1170	189										

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.2	8.0	7.8	8.5	4.5	7.5	7.5	7.3	6.7	8.2	7.9
2	8.6	8.3	7.9	7.2	8.2	8.1	7.5	7.5	7.1	6.0	8.1	7.5
3	8.8	8.4	7.8	7.7	8.3	8.2	7.6	7.4	7.5	6.7	7.6	7.5
4	8.9	8.6	7.9	7.8	8.3	8.2	7.7	7.6	7.7	7.5	7.7	7.6
5	9.0	8.7	7.8	7.8	8.3	8.2	7.8	7.6	7.6	7.5	7.8	7.7
6	9.0	8.8	8.0	7.8	8.2	8.2	7.7	7.4	7.6	7.2	7.8	7.6
7	8.9	8.8	8.2	8.0	8.2	6.2	7.5	7.3	7.6	7.4	7.8	7.7
8	8.9	8.7	8.2	8.0	6.2	5.4	7.4	6.4	7.5	7.2	7.9	7.8
9	8.7	8.4	8.2	8.1	5.4	5.1	7.2	6.6	7.6	7.4	7.9	7.8
10	8.4	8.0	8.1	8.0	8.0	4.3	6.7	4.5	7.6	7.2	8.0	7.8
11	8.1	7.9	8.1	8.0	7.6	6.3	7.1	6.3	7.6	7.0	7.9	7.8
12	8.0	7.8	8.1	8.0	7.9	7.6	7.3	7.0	7.4	4.8	7.9	7.8
13	7.9	7.8	8.1	8.0	8.0	7.9	7.6	7.2	7.5	6.9	7.9	7.5
14	8.1	7.8	8.1	7.9	8.0	7.9	7.6	7.4	7.5	7.0	7.5	7.5
15	8.1	7.8	8.1	7.9	7.9	7.5	7.7	7.6	7.6	7.0	7.6	7.5
16	7.9	7.6	8.1	8.0	7.6	7.5	7.6	7.4	7.5	6.0	7.7	7.6
17	7.7	7.6	8.1	8.0	7.9	7.6	7.6	7.2	7.3	5.7	7.7	7.6
18	7.9	7.7	8.1	8.0	7.9	7.8	7.4	7.2	7.7	7.1	7.7	7.6
19	8.1	7.8	8.1	7.9	7.8	7.7	7.4	7.4	8.0	7.7	---	---
20	8.2	7.8	8.1	7.9	7.8	7.7	7.5	7.4	8.0	7.7	---	---
21	8.1	7.9	8.1	7.9	7.8	7.7	7.6	7.5	7.8	7.7	---	---
22	8.0	7.8	8.2	8.1	7.9	7.8	7.7	7.6	8.0	7.8	---	---
23	8.0	7.7	8.3	8.1	7.9	7.8	7.6	7.3	8.0	7.8	---	---
24	7.8	7.7	8.4	8.2	7.8	7.8	7.5	7.4	7.8	7.7	---	---
25	7.7	7.6	8.5	8.4	7.8	7.7	7.9	7.5	7.9	7.8	7.8	7.7
26	7.7	7.6	8.5	8.4	7.8	7.7	7.6	7.4	8.1	7.9	7.8	7.8
27	7.7	7.6	8.4	8.4	7.9	7.7	7.5	7.3	8.0	7.8	7.9	7.8
28	7.8	7.7	8.4	8.3	7.8	7.7	7.5	7.3	8.0	7.8	7.9	7.9
29	8.1	7.8	8.3	8.2	7.8	7.7	7.5	7.1	8.1	7.9	8.0	7.9
30	8.1	7.9	8.4	8.3	8.0	7.6	7.5	7.4	---	---	8.0	7.9
31	8.1	7.9	---	---	7.7	7.4	7.4	7.3	---	---	8.2	7.9
MONTH	9.0	7.6	8.5	7.2	8.5	4.3	7.9	4.5	8.1	4.8	8.2	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.2	8.0	7.9	7.5	7.6	7.4	7.4	7.1	8.6	8.1	7.9	7.5
2	8.3	8.0	7.9	7.5	7.7	7.5	7.4	7.3	8.5	8.0	7.9	7.6
3	8.3	8.1	8.1	7.6	7.6	7.4	7.5	7.3	8.0	7.7	7.8	7.7
4	8.4	8.1	8.3	7.7	7.6	7.3	7.6	7.4	7.8	7.5	7.9	7.6
5	8.4	8.1	8.3	7.8	7.5	7.1	7.7	7.6	7.9	7.5	8.0	7.7
6	8.5	8.1	8.3	8.0	7.2	7.0	7.8	7.6	7.9	7.7	8.0	7.6
7	8.6	8.2	8.2	7.8	7.7	7.1	7.9	7.6	7.8	7.5	8.0	7.6
8	8.5	8.2	8.0	7.6	7.3	7.1	7.9	7.6	7.5	7.5	7.9	7.8
9	8.5	8.2	7.9	7.3	7.3	7.2	8.0	7.8	7.5	7.4	7.9	7.8
10	---	---	7.5	7.4	7.4	7.2	8.2	7.9	7.6	7.4	8.0	7.8
11	8.2	7.9	7.7	7.4	7.8	7.3	8.5	8.1	8.0	7.6	8.0	7.8
12	8.5	7.9	7.8	7.4	7.8	7.5	8.3	7.9	7.9	7.6	8.1	7.6
13	8.5	7.6	8.0	7.5	7.6	6.8	7.9	6.9	8.0	7.9	8.1	7.8
14	8.3	7.7	8.0	7.5	7.1	6.9	7.6	7.0	---	---	8.1	7.4
15	7.9	7.3	8.1	7.3	7.1	7.0	7.8	7.3	---	---	7.5	7.3
16	7.5	7.4	7.3	7.3	7.2	7.1	7.4	7.2	---	---	7.5	7.4
17	7.5	7.4	7.5	7.3	7.2	7.2	7.4	7.2	7.2	7.1	7.6	7.4
18	7.5	7.4	7.5	7.2	7.3	7.2	7.7	7.3	7.1	7.0	7.4	7.1
19	7.5	7.4	7.7	7.3	7.5	7.2	7.6	6.9	7.3	7.2	7.4	7.2
20	7.6	7.4	7.8	7.4	7.3	7.3	7.5	7.0	7.3	7.1	7.5	7.4
21	7.4	7.4	8.0	7.4	7.5	7.3	7.4	6.9	7.6	7.2	7.6	7.5
22	7.5	7.3	8.2	7.5	7.5	7.4	7.2	7.0	7.4	7.3	7.7	7.6
23	7.4	7.3	8.0	7.6	7.6	7.4	7.4	7.0	7.3	7.0	8.8	7.7
24	7.5	7.4	7.9	7.5	7.6	7.4	7.6	7.1	7.5	7.1	8.1	6.7
25	7.6	7.5	7.9	7.5	7.6	7.5	7.8	7.4	7.6	7.4	6.8	6.1
26	7.6	7.5	8.1	7.5	7.7	7.4	8.2	7.8	7.8	7.3	7.6	5.8
27	7.6	7.6	8.3	7.9	7.7	7.5	8.0	7.8	7.4	7.3	7.8	7.6
28	7.7	7.6	8.3	7.9	7.8	7.4	8.0	7.6	7.6	7.2	7.8	7.7
29	7.8	7.6	8.1	7.7	7.6	7.1	8.1	7.7	7.5	7.3	7.8	7.6
30	7.9	7.6	7.7	7.4	7.4	7.1	8.4	7.9	7.6	7.3	7.8	7.5
31	---	---	7.4	7.2	---	---	8.5	8.1	7.6	7.3	---	---
MONTH	8.6	7.3	8.3	7.2	7.8	6.8	8.5	6.9	8.6	7.0	8.8	5.8
YEAR	9.0	4.3										

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	10.5	9.5	7.0	13.5	10.9	14.2	13.7	14.3	13.8	15.0	13.6
2	13.6	11.3	8.1	5.3	13.7	12.9	14.0	13.5	14.0	13.4	14.2	12.4
3	15.0	11.7	6.5	4.7	14.7	13.7	14.5	13.6	13.9	13.3	14.3	13.6
4	13.8	11.4	6.4	5.0	15.0	14.5	14.6	13.9	14.5	13.2	14.5	14.1
5	13.9	12.2	6.6	4.9	15.0	15.0	14.7	14.3	14.7	13.6	14.5	14.1
6	13.9	11.6	7.1	5.9	15.0	15.0	15.0	14.6	14.7	14.0	14.7	13.7
7	12.8	10.9	8.7	6.9	14.2	12.1	14.8	14.4	14.7	13.4	14.3	13.8
8	13.4	10.7	9.2	8.3	12.2	11.0	14.9	14.4	13.4	12.7	14.8	12.9
9	10.9	9.4	9.4	8.6	12.4	11.8	14.5	13.8	13.9	13.1	15.0	14.5
10	9.7	8.0	10.1	9.3	12.4	11.6	14.2	14.0	14.1	13.6	15.0	14.5
11	8.6	7.4	10.3	9.9	11.7	9.1	14.3	13.8	14.2	13.5	14.3	14.4
12	8.2	7.3	10.6	10.2	12.8	8.9	14.1	13.8	14.1	13.6	14.4	13.1
13	7.4	6.4	10.6	10.3	14.3	12.8	13.8	13.0	14.3	13.6	13.8	13.2
14	8.1	6.9	10.8	10.3	14.2	13.2	15.0	13.3	14.3	13.5	13.6	13.1
15	7.7	5.8	11.0	10.1	13.9	11.5	15.0	15.0	14.7	13.3	13.9	13.6
16	6.4	4.1	10.9	9.9	12.5	11.7	15.0	14.9	14.0	13.8	13.6	13.1
17	6.0	4.3	10.7	9.8	13.1	12.5	15.0	14.1	14.0	13.6	13.3	13.1
18	8.5	5.3	10.8	9.7	14.1	13.0	14.2	13.8	14.2	13.7	13.6	13.3
19	9.2	6.3	10.3	7.9	14.5	14.1	13.9	13.4	14.9	14.2	---	---
20	9.8	7.2	11.2	7.8	14.5	13.9	14.5	13.6	15.0	14.5	---	---
21	10.4	7.5	9.4	8.1	13.9	13.4	14.5	14.0	15.0	14.4	---	---
22	8.9	7.0	10.3	9.6	14.0	13.4	14.8	13.9	14.9	14.5	---	---
23	9.1	6.4	11.3	10.2	14.7	13.7	14.2	13.8	15.0	14.4	---	---
24	7.4	6.3	13.0	11.2	14.2	13.7	14.4	14.0	14.7	14.1	---	---
25	7.0	5.7	14.0	12.9	13.8	13.1	15.0	12.9	15.0	13.9	14.7	14.3
26	7.0	5.6	14.2	13.9	13.9	13.2	15.0	14.8	15.0	14.1	14.6	13.8
27	7.2	6.2	14.1	13.7	13.9	12.5	15.0	13.6	14.9	14.1	13.8	12.8
28	7.9	6.8	13.9	13.6	12.8	12.4	14.7	14.2	14.9	14.2	13.6	12.2
29	9.5	7.8	13.7	13.1	12.5	11.5	14.5	14.2	15.0	14.0	13.7	12.4
30	10.1	7.4	13.5	12.4	14.2	11.8	14.3	14.1	---	---	14.0	12.8
31	10.0	7.5	---	---	13.7	12.8	14.4	14.0	---	---	14.3	13.4
MONTH	15.0	4.1	14.2	4.7	15.0	8.9	15.0	12.9	15.0	12.7	15.0	12.2

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.4	12.6	10.6	8.3	8.7	7.0	7.9	6.8	14.8	10.0	8.1	5.9
2	14.0	13.4	9.3	7.4	8.7	7.8	7.1	6.4	12.2	9.5	8.4	6.9
3	14.8	14.0	9.5	8.1	7.6	6.2	8.1	7.0	10.3	8.0	6.9	6.2
4	15.0	12.9	10.7	8.2	6.2	4.3	8.8	8.1	8.5	6.9	7.4	5.4
5	14.7	13.1	12.4	8.4	5.2	4.6	8.8	8.2	11.5	6.8	8.9	6.8
6	15.0	12.3	11.9	10.4	7.0	5.0	9.0	8.4	10.6	6.6	8.9	6.6
7	13.9	12.2	10.4	7.8	7.1	6.2	10.0	8.7	9.1	7.2	10.8	6.6
8	15.0	12.4	9.3	6.8	8.1	6.3	10.3	8.6	7.3	6.5	9.9	8.6
9	15.0	15.0	10.5	8.8	6.9	5.7	11.0	8.4	6.6	5.4	9.5	8.4
10	---	---	10.8	10.2	7.3	5.7	12.4	9.1	7.1	5.4	11.1	8.6
11	12.8	10.4	10.8	9.8	8.8	5.8	15.0	11.5	8.2	5.1	10.7	8.7
12	13.1	9.4	10.8	9.0	8.4	6.6	15.0	11.7	8.6	7.2	10.8	8.5
13	10.9	7.8	10.8	8.7	7.4	4.4	11.3	5.7	10.0	9.7	10.7	8.4
14	9.1	6.6	10.7	8.7	7.1	6.6	7.7	5.8	---	---	8.2	7.3
15	8.8	7.6	10.5	8.0	7.4	6.7	7.7	5.9	---	---	7.7	7.2
16	9.2	8.4	8.9	8.5	8.2	7.3	6.9	6.0	---	---	9.1	7.3
17	9.6	9.0	9.1	8.3	8.5	8.0	6.8	6.2	8.1	5.6	9.2	8.2
18	9.6	8.5	9.0	7.2	8.2	7.8	7.5	6.2	6.1	5.9	8.2	7.5
19	9.1	8.3	8.7	6.3	8.1	6.9	7.1	6.2	6.3	6.0	8.8	8.2
20	9.6	8.2	9.1	6.8	7.5	5.8	7.2	6.3	6.4	6.2	9.1	8.7
21	10.2	9.6	9.8	8.0	6.6	6.0	6.2	5.5	6.4	6.1	9.2	8.3
22	10.2	9.8	10.9	8.0	7.3	6.0	5.9	4.6	6.6	5.9	9.3	8.4
23	10.0	9.3	10.4	7.9	8.5	7.3	6.7	4.7	7.6	6.2	11.3	8.5
24	9.8	9.3	10.9	7.9	8.5	8.2	8.3	4.5	7.4	5.0	11.3	9.1
25	10.5	9.4	11.7	7.5	8.5	8.0	9.0	5.8	7.8	6.5	9.6	8.9
26	10.7	9.6	14.3	7.8	8.3	7.5	10.3	7.2	7.5	6.5	9.4	8.4
27	10.5	9.2	14.4	10.3	8.6	7.0	8.3	5.9	7.0	6.6	10.1	9.1
28	10.7	9.0	14.4	10.8	8.5	6.9	8.3	5.7	7.0	6.4	10.7	9.7
29	10.8	8.8	12.5	9.0	7.7	6.7	10.5	7.4	6.7	5.6	10.2	9.7
30	10.6	9.7	9.0	6.0	7.5	7.1	12.3	9.1	6.6	5.6	10.3	9.7
31	---	---	7.8	4.5	---	---	13.5	9.5	7.8	5.5	---	---
MONTH	15.0	6.6	14.4	4.5	8.8	4.3	15.0	4.5	14.8	5.0	11.3	5.4
YEAR	15.0	4.1										

04199100 HURON RIVER BELOW MILAN, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.0	16.0	15.0	3.0	2.0	3.0	2.0	0.5	0.5	3.0	0.5
2	21.5	20.5	16.5	15.5	2.5	1.5	3.0	2.0	0.5	0.5	4.5	2.5
3	22.0	21.0	15.5	13.5	2.0	1.5	2.5	1.5	0.5	0.5	2.5	1.0
4	22.5	21.5	13.5	12.0	1.5	1.0	2.5	1.0	0.5	0.5	2.0	0.0
5	21.5	20.5	12.0	11.0	1.5	1.0	1.0	0.5	0.5	0.5	2.5	0.0
6	20.5	19.0	11.0	9.0	2.5	1.5	1.0	0.5	0.5	0.5	0.5	0.0
7	19.5	17.5	9.0	6.5	4.5	2.0	1.0	0.5	0.5	0.5	3.5	0.0
8	18.0	16.5	6.5	6.0	5.5	4.5	1.0	0.5	0.5	0.5	3.5	1.0
9	16.5	15.5	6.0	5.5	5.5	5.0	0.5	0.5	0.5	0.0	1.0	0.5
10	15.5	14.5	6.0	5.0	7.5	5.5	1.0	0.5	0.5	0.0	1.0	0.0
11	14.5	13.0	6.5	5.5	9.5	7.5	2.0	1.0	0.5	0.0	3.0	0.5
12	14.0	13.0	6.0	5.5	7.5	4.0	2.0	1.0	0.5	0.0	5.0	3.0
13	14.0	13.0	6.5	5.5	4.0	3.5	3.0	2.0	0.5	0.5	4.5	3.5
14	14.5	13.0	7.5	5.5	3.5	2.5	2.0	0.5	0.5	0.0	4.5	3.5
15	15.5	13.5	9.0	7.5	7.5	2.5	0.5	0.5	0.5	0.0	3.5	3.0
16	15.5	14.5	9.0	8.5	7.5	6.0	0.5	0.5	0.5	0.0	4.5	3.5
17	16.5	15.0	9.5	8.5	6.0	3.5	1.0	0.5	0.5	0.0	4.5	4.0
18	17.5	15.5	11.0	9.0	3.5	1.5	0.5	0.5	0.5	0.0	4.0	3.5
19	17.0	16.0	11.0	9.5	1.5	1.0	0.5	0.5	0.0	0.0	---	---
20	18.5	16.0	9.5	7.5	2.5	1.0	0.5	0.5	0.5	0.0	---	---
21	18.0	16.5	7.5	6.0	3.0	2.5	0.5	0.5	0.5	0.0	---	---
22	17.5	17.0	6.0	4.5	3.0	2.0	0.5	0.5	0.5	0.0	---	---
23	17.5	17.0	4.5	3.5	2.0	1.5	2.0	0.5	0.5	0.0	---	---
24	17.5	17.0	3.5	2.5	3.0	1.5	3.0	1.5	0.5	0.0	---	---
25	17.0	16.5	3.0	2.0	4.0	2.5	3.0	0.5	0.5	0.0	3.5	3.0
26	17.0	16.5	2.5	2.0	4.0	3.5	0.5	0.5	0.5	0.0	5.5	2.0
27	17.0	16.0	2.5	2.5	7.0	3.5	0.5	0.5	0.5	0.0	6.5	5.0
28	17.0	16.0	3.0	2.5	6.5	5.0	0.5	0.5	0.5	0.5	7.0	5.5
29	17.0	15.5	3.0	3.0	5.0	4.5	0.5	0.5	1.0	0.5	6.5	4.0
30	16.5	15.5	3.5	2.5	7.5	3.5	0.5	0.5	---	---	4.5	4.0
31	16.5	15.5	---	---	4.5	3.0	0.5	0.5	---	---	5.5	4.0
MONTH	22.5	13.0	16.5	2.0	9.5	1.0	3.0	0.5	1.0	0.0	7.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	17.5	13.0	17.5	15.5	23.0	19.0	25.5	23.5	24.5	23.0
2	5.5	4.5	18.5	16.5	19.5	15.5	23.5	21.0	25.0	24.0	24.5	23.0
3	6.0	4.0	19.5	17.0	21.0	19.0	21.0	20.0	25.5	24.0	23.0	22.5
4	9.0	5.0	17.5	16.0	24.0	21.0	20.5	19.0	25.0	23.5	22.5	21.0
5	9.5	7.0	16.0	13.5	23.5	18.5	20.5	18.5	24.0	23.0	21.0	20.0
6	10.5	7.5	18.0	14.0	22.0	20.5	19.5	18.0	23.5	22.5	21.5	19.5
7	9.5	5.5	18.0	17.0	22.5	19.5	21.5	18.0	22.5	22.0	21.5	19.5
8	5.0	2.0	18.0	14.0	23.5	20.0	22.0	19.0	22.0	21.0	21.5	21.0
9	5.0	3.5	14.0	10.0	22.5	21.5	22.5	21.0	21.0	20.0	21.5	20.5
10	---	---	14.0	9.5	21.5	20.0	24.0	22.0	21.0	19.0	21.5	20.5
11	11.5	11.0	17.0	12.0	21.0	19.5	26.5	23.5	22.0	20.5	22.0	20.5
12	13.5	11.5	17.5	15.0	20.5	19.0	28.0	25.5	21.5	20.5	21.5	21.0
13	17.0	12.0	18.5	15.5	20.5	19.0	27.0	22.5	21.5	21.5	22.5	21.0
14	17.5	14.0	17.5	16.0	22.5	19.0	25.5	23.0	---	---	23.5	19.5
15	14.0	12.0	18.0	15.0	22.0	21.0	26.5	24.0	---	---	19.5	18.5
16	13.5	12.0	16.0	15.0	21.0	19.5	24.5	24.0	---	---	19.5	17.5
17	14.0	10.5	18.0	14.5	20.0	18.0	24.5	24.0	25.0	22.0	21.5	19.0
18	15.5	11.0	20.0	16.5	20.0	18.0	28.0	24.5	23.0	22.0	20.5	19.0
19	15.5	13.5	20.5	19.0	22.0	19.5	27.0	23.5	24.0	21.5	20.5	19.5
20	15.5	10.5	21.5	19.0	24.5	21.0	27.5	24.0	24.0	21.0	20.0	18.0
21	10.5	9.0	20.5	19.0	23.0	21.5	27.5	26.5	24.0	22.5	19.0	18.5
22	10.5	9.5	24.0	19.5	21.5	16.5	29.5	27.0	25.0	22.5	20.0	18.0
23	12.5	10.0	23.5	20.5	16.5	13.5	30.0	28.0	23.0	21.0	19.0	17.5
24	12.0	10.5	24.5	21.0	14.0	14.0	29.5	28.0	24.0	22.0	20.5	19.0
25	12.0	9.0	23.5	22.0	16.0	14.0	28.0	27.0	24.5	23.0	---	---
26	12.0	9.5	24.0	21.5	18.0	16.0	27.0	25.0	25.0	23.0	---	---
27	13.0	11.5	22.0	21.0	20.5	17.5	25.0	23.5	24.0	22.0	---	---
28	13.0	11.5	22.5	20.5	21.5	20.0	24.0	22.5	22.5	21.5	---	---
29	14.0	11.5	22.5	21.0	21.5	19.5	23.5	22.0	23.5	21.0	---	---
30	13.5	11.5	22.0	21.5	20.0	18.5	24.0	22.5	24.5	22.0	---	---
31	---	---	21.5	17.5	---	---	24.5	23.0	24.5	22.5	---	---
MONTH	17.5	2.0	24.5	9.5	24.5	13.5	30.0	18.0	25.5	19.0	24.5	17.5
YEAR	30.0	0.0										

04199500 VERMILION RIVER NEAR VERMILION, OHIO

LOCATION.--Lat 41°22'55", long 82°19'01", in T.6 N., R.19 W., Lorain County, at gaging station on right bank 40 ft downstream from bridge on North Ridge Road, 3.5 miles southeast of Vermilion, and 4.5 miles upstream from mouth. Continuous water-quality recorder located at bridge on North Ridge Road.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1950 to February 1952, February 1969 to September 1972.
Water temperatures: March to August 1950, February 1969 to September 1972.
Sediment records: Water years 1970-72 (partial-record station).

EXTREMES.--1971-72:
Water temperatures: Maximum, 33.5°C July 23; minimum, freezing point on many days during December to February.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
01...	0858	3.2	170	0	140	43	.3	.40
12...	1320	--	--	--	--	--	--	--
26...	1305	2.9	196	0	160	51	.3	.20
NOV.								
12...	1340	4.1	256	0	150	45	.3	.70
26...	0813	5.4	198	0	130	40	.2	.00
DEC.								
01...	1330	15	196	6	140	67	.2	.40
31...	1620	764	124	0	130	34	.2	3.7
JAN.								
11...	1120	724	84	0	100	32	.3	6.2
17...	1310	85	152	0	160	44	.3	6.8
FEB.								
14...	0840	135	202	0	170	80	.2	1.8
18...	0815	425	84	0	88	38	.1	3.2
MAR.								
07...	1130	204	110	0	120	27	.2	4.6
18...	0855	861	78	0	76	20	.2	5.0
APR.								
10...	0740	161	150	0	130	32	.2	1.2
21...	0736	2240	78	0	64	11	.2	3.1
MAY								
13...	1620	173	118	0	84	16	.2	2.6
27...	1145	38	180	4	120	24	.2	.60
JUNE								
05...	0745	220	200	0	120	32	.3	.80
06...	1640	--	--	--	--	--	--	--
23...	1135	732	68	0	66	22	.2	9.4
JULY								
18...	1545	96	204	0	110	40	.2	1.4
24...	0850	54	127	0	70	22	.2	3.0
AUG.								
11...	1300	12	192	0	110	35	.2	.70
19...	1500	798	116	0	56	16	.2	1.8
SEP.								
11...	0920	7.9	200	0	120	38	.2	.60
18...	0847	1060	65	0	37	8.7	.1	1.8

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.					
04...	1215	22.0	1.9	8	.04
NOV.					
01...	1520	17.0	2.7	8	.06
08...	1450	5.0	4.1	10	.11
DEC.					
01...	1330	1.5	15	10	.40
JAN.					
11...	1120	2.0	724	288	563
11...	1320	2.5	679	87	159
MAR.					
06...	1500	1.0	220	30	18
MAY					
11...	1630	16.0	416	44	49
JULY					
20...	1515	28.0	96	87	23
SEP.					
19...	1130	19.0	330	88	78
21...	1345	18.5	115	21	6.5

04199500 VERMILION RIVER NEAR VERMILION, OHIO--Continued

EXTREMES.--Continued
Period of record:
Water temperatures (1971-72): Maximum, 33.5°C July 23, 1972; minimum, freezing point on many days during 1971 and 1972.

REMARKS.--Continuous water-quality recorder operated since February 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Pesticide analyses for this station on page 390.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
01...	1.6	426	280	140	671	8.1	--	--
12...	--	--	--	--	--	--	.6	6.0
26...	.7	490	320	160	765	7.7	--	--
NOV.								
12...	3.2	540	360	150	789	7.9	--	--
26...	.1	428	280	120	733	8.2	--	--
DEC.								
01...	1.6	494	310	140	802	8.3	--	--
31...	16	390	270	170	597	7.9	--	--
JAN.								
11...	27	308	200	130	476	7.2	--	--
17...	30	494	340	220	745	8.1	--	--
FEB.								
14...	8.6	596	370	200	874	8.1	--	--
18...	14	294	180	110	468	7.8	--	--
MAR.								
07...	20	346	230	140	524	7.3	--	--
18...	22	270	170	110	388	7.8	--	--
APR.								
10...	5.2	358	270	150	590	8.2	--	--
21...	14	182	140	76	309	7.7	--	--
MAY								
13...	12	262	200	100	420	8.0	--	--
27...	2.7	356	270	120	577	8.4	--	--
JUNE								
05...	3.5	402	290	120	638	7.6	--	--
06...	--	--	--	--	--	--	<.5	8.0
23...	42	262	160	100	386	7.6	--	--
JULY								
18...	6.4	394	280	110	622	8.1	--	--
24...	13	234	160	76	423	7.3	--	--
AUG.								
11...	3.1	384	260	100	594	8.2	--	--
19...	7.9	214	150	55	350	7.1	--	--
SEP.								
11...	2.7	400	290	130	636	7.7	--	--
18...	7.8	150	94	41	227	7.8	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN.							
11...	1320	71	83	92	96	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
21...	1345	2	1	1	2	2	3	6	11	19	39	82

04199500 VERMILION RIVER NEAR VERMILION, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	625	612	852	735	---	---	---	---	---	---	---	---
2	632	612	895	754	---	---	---	---	---	---	---	---
3	634	618	---	---	---	---	---	---	---	---	---	---
4	636	628	---	---	---	---	---	---	---	---	---	---
5	639	628	---	---	---	---	---	---	---	---	---	---
6	679	627	---	---	---	---	616	555	---	---	---	---
7	937	638	---	---	774	609	716	616	---	---	554	520
8	923	654	---	---	630	601	666	634	---	---	593	554
9	937	621	---	---	681	619	805	501	---	---	655	502
10	966	661	---	---	805	676	543	470	---	---	708	392
11	887	672	---	---	825	707	490	450	---	---	743	559
12	950	752	---	---	900	783	515	494	---	---	667	405
13	898	596	---	---	895	744	608	515	---	---	734	363
14	744	714	---	---	800	634	639	492	---	---	431	380
15	732	517	---	---	643	531	564	457	---	---	456	410
16	741	690	---	---	670	539	651	499	---	---	450	412
17	763	694	---	---	670	619	711	651	---	---	430	406
18	739	706	---	---	755	543	759	581	---	---	406	386
19	741	730	---	---	737	654	742	620	---	---	429	402
20	744	735	---	---	---	---	781	572	---	---	470	429
21	750	739	---	---	---	---	680	594	---	---	501	468
22	755	741	---	---	713	637	663	492	---	---	511	497
23	752	744	---	---	675	579	615	552	---	---	497	426
24	757	752	---	---	628	543	603	579	---	---	426	412
25	761	757	---	---	563	521	598	476	---	---	449	412
26	766	754	---	---	---	---	627	542	---	---	481	437
27	768	757	---	---	---	---	656	557	---	---	489	298
28	781	712	---	---	---	---	727	656	---	---	571	451
29	781	649	---	---	---	---	760	569	---	---	597	480
30	800	697	---	---	---	---	739	564	---	---	---	---
31	813	723	---	---	---	---	---	---	---	---	---	---
MONTH	966	517	---	---	---	---	805	450	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	522	491	587	555	---	---	672	658	531	520
2	---	---	507	483	591	567	---	---	658	619	592	521
3	---	---	518	499	679	587	---	---	645	607	787	544
4	---	---	530	516	636	618	516	376	658	598	---	---
5	---	---	542	516	---	---	479	420	603	591	575	552
6	---	---	542	521	496	439	546	426	591	561	578	561
7	---	---	555	527	492	433	573	499	561	522	561	558
8	---	---	598	545	544	492	592	477	520	491	---	---
9	---	---	534	354	---	---	586	550	561	501	---	---
10	---	---	391	336	---	---	595	536	577	561	---	---
11	---	---	379	337	---	---	---	---	581	555	---	---
12	---	---	420	379	---	---	---	---	589	569	634	625
13	---	---	444	420	---	---	581	573	595	580	638	509
14	548	533	456	442	---	---	577	553	603	578	533	366
15	558	296	465	452	---	---	567	542	589	572	490	341
16	---	---	450	413	---	---	575	545	596	584	383	349
17	---	---	422	398	---	---	598	572	589	562	406	201
18	---	---	429	403	---	---	614	370	603	587	256	179
19	---	---	448	429	---	---	490	299	607	317	356	256
20	---	---	462	448	---	---	456	367	374	296	418	356
21	---	---	477	462	---	---	505	460	431	374	458	418
22	---	---	498	477	---	---	544	475	464	281	488	458
23	---	---	521	498	541	522	561	477	398	334	505	488
24	---	---	545	520	623	409	533	352	469	398	527	499
25	396	354	570	544	669	264	566	533	509	465	534	521
26	433	394	570	556	746	556	570	555	510	271	536	432
27	456	430	575	559	---	---	581	542	404	327	476	398
28	479	457	698	575	---	---	575	555	451	404	528	383
29	494	480	698	652	---	---	580	561	480	346	389	359
30	509	494	652	530	---	---	583	555	503	480	376	277
31	---	---	583	541	---	---	674	572	520	503	---	---
MONTH	---	---	698	336	---	---	674	299	672	271	787	179

04199500 VERMILION RIVER NEAR VERMILION, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	15.5	10.0	7.5	---	---	3.5	2.5	0.5	0.0	---	---
2	25.0	18.0	10.5	8.0	---	---	3.0	2.0	0.5	0.5	---	---
3	24.5	18.5	---	---	---	---	2.5	1.0	1.0	0.5	---	---
4	24.0	19.0	---	---	---	---	2.0	0.0	0.5	0.0	---	---
5	22.0	17.5	---	---	---	---	0.5	0.0	1.5	0.0	---	---
6	19.0	14.5	---	---	---	---	0.5	0.0	1.5	0.0	---	---
7	14.5	12.5	---	---	6.0	5.5	0.5	0.5	0.5	0.0	5.5	4.0
8	16.0	12.5	---	---	6.5	6.0	0.5	0.0	0.0	0.0	4.5	1.0
9	14.0	13.0	---	---	7.5	6.5	0.5	0.0	---	---	1.5	0.5
10	14.5	11.0	---	---	10.0	7.0	1.5	0.0	---	---	2.0	0.5
11	14.5	9.5	---	---	10.0	5.5	2.0	0.0	---	---	5.0	1.0
12	14.5	9.5	---	---	5.5	4.0	2.0	0.5	---	---	6.0	4.5
13	15.0	12.5	---	---	4.5	2.0	3.5	0.5	---	---	6.0	4.0
14	16.0	12.5	---	---	3.0	0.5	0.5	0.0	---	---	6.0	6.0
15	17.0	12.5	---	---	8.0	3.0	0.0	0.0	---	---	5.0	4.5
16	16.5	13.5	11.0	9.0	8.0	6.0	0.0	0.0	---	---	5.5	4.5
17	19.0	14.0	11.5	7.5	6.0	3.0	0.0	0.0	---	---	5.0	5.0
18	19.5	14.0	13.5	8.0	3.0	1.5	0.0	0.0	---	---	5.0	4.5
19	19.0	12.5	13.5	7.5	2.0	1.0	0.0	0.0	---	---	6.0	3.0
20	19.5	12.5	---	---	3.0	0.5	0.0	0.0	---	---	7.5	5.0
21	20.5	14.0	---	---	3.5	2.5	0.0	0.0	---	---	9.5	6.0
22	17.5	16.0	---	---	2.5	0.0	0.5	0.0	---	---	9.5	1.5
23	18.5	12.5	---	---	1.5	0.0	0.5	0.0	---	---	6.5	4.0
24	17.0	15.5	---	---	4.5	1.5	1.0	0.0	---	---	5.0	3.0
25	16.0	15.0	---	---	4.0	2.0	0.0	0.0	---	---	5.0	2.0
26	18.0	13.5	---	---	6.0	4.0	0.0	0.0	---	---	6.5	1.5
27	18.5	13.5	---	---	8.5	5.0	0.0	0.0	---	---	8.0	4.5
28	15.5	3.0	---	---	8.0	3.5	0.0	0.0	---	---	8.0	4.5
29	8.0	5.0	---	---	3.5	1.0	0.0	0.0	---	---	6.0	5.0
30	10.0	5.0	---	---	6.5	2.5	0.0	0.0	---	---	7.0	4.5
31	10.0	6.5	---	---	3.5	3.0	0.0	0.0	---	---	8.5	3.5
MONTH	25.0	3.0	---	---	10.0	0.0	3.5	0.0	---	---	9.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.5	19.5	15.0	16.0	12.5	24.0	19.0	28.0	23.0	27.5	22.5
2	7.5	5.0	21.0	15.5	21.5	16.0	23.0	20.5	26.0	23.5	24.5	21.5
3	9.0	5.0	20.5	16.0	23.0	19.0	22.0	20.0	27.0	23.0	---	---
4	10.0	7.0	17.5	13.5	25.5	20.0	21.5	18.0	26.5	20.5	---	---
5	11.0	10.5	18.5	11.0	24.0	19.5	19.0	17.0	25.5	17.0	---	---
6	12.5	2.5	22.0	15.0	23.0	20.0	22.0	15.0	22.0	18.0	21.0	16.0
7	8.5	2.5	20.0	15.5	24.5	18.0	21.5	11.0	23.5	20.0	22.0	16.5
8	5.5	1.0	19.0	15.5	26.0	19.5	22.5	18.0	22.0	19.5	---	---
9	8.0	2.5	16.0	14.0	25.5	20.5	23.5	19.0	19.5	17.5	---	---
10	10.0	6.0	16.5	12.5	21.0	16.5	27.0	21.0	25.5	15.5	---	---
11	13.0	8.5	19.0	13.5	22.5	14.0	29.5	23.5	25.5	17.0	---	---
12	15.0	10.0	20.5	14.0	24.0	17.0	28.0	25.0	25.0	20.5	22.5	21.5
13	19.0	13.0	18.5	16.5	25.0	22.5	27.0	23.5	30.0	20.5	26.0	21.0
14	15.0	9.5	19.5	16.0	28.0	22.5	29.0	24.0	29.0	21.5	23.0	19.5
15	14.5	11.5	19.0	17.0	24.0	22.0	28.0	25.0	29.5	23.0	20.0	18.0
16	13.5	12.5	18.0	16.5	24.0	20.0	27.5	24.0	27.0	19.0	20.0	17.0
17	14.5	9.0	18.0	15.5	23.0	19.0	29.0	24.0	25.0	23.0	22.0	18.5
18	16.0	12.0	21.5	15.0	24.0	18.0	30.0	25.0	27.5	22.5	21.0	18.5
19	16.5	13.5	22.0	16.5	25.5	20.0	27.5	23.5	25.0	21.5	20.5	18.5
20	15.5	10.5	20.5	17.5	25.5	23.0	30.0	24.5	25.5	21.0	20.0	16.0
21	11.0	9.5	24.0	16.5	23.5	18.0	32.5	26.5	26.5	21.5	20.5	15.5
22	11.5	9.5	24.0	18.5	18.0	13.5	32.5	27.5	24.5	22.5	19.5	15.5
23	13.0	6.5	24.0	17.5	14.0	12.5	33.5	27.0	24.5	21.5	15.5	13.5
24	13.0	10.5	25.5	19.0	14.5	14.0	29.5	24.5	26.5	23.0	17.5	14.0
25	13.0	8.5	24.5	18.5	17.0	14.0	29.5	22.5	27.0	23.0	20.5	17.5
26	14.0	8.0	24.0	15.5	19.0	16.0	25.0	23.0	25.0	22.0	21.0	19.0
27	14.5	10.0	22.5	13.5	21.5	16.0	23.0	21.5	24.0	22.5	20.5	16.5
28	15.5	9.5	22.5	16.0	22.5	13.5	25.5	19.5	25.0	21.0	17.5	13.5
29	14.5	11.5	25.0	17.5	21.5	19.5	26.5	20.0	26.0	21.0	17.5	16.0
30	17.5	12.0	22.0	18.5	21.5	18.5	28.0	20.0	26.5	20.0	16.5	13.5
31	---	---	18.5	14.0	---	---	30.0	21.0	27.5	20.5	---	---
MONTH	19.0	1.0	25.5	11.0	28.0	12.5	33.5	11.0	30.0	15.5	---	---
YEAR	33.5	0.0										

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO

LOCATION.--Lat 41°15'51", long 82°03'39", in T.4 N., R.16 W., Lorain County, on right downstream abutment of bridge on Crook Street at south edge of Grafton, and 14 miles upstream from West Branch Black River.

DRAINAGE AREA.--170 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1969 to September 1972.
Water temperatures: April 1969 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,270 micromhos Nov. 18, 19; minimum, 271 micromhos Apr. 14.
Water temperatures: Maximum, 33.0°C July 24; minimum, freezing point on several days during December to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	PH (UNITS)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.							
13...	1100	--	--	--	--	--	--
13...	1105	7.8	0	170	140	.2	.40
14...	1435	8.2	0	160	120	.2	.20
NOV.							
01...	1000	8.2	0	150	120	.3	.20
18...	1715	7.8	0	190	140	.3	.20
DEC.							
01...	0955	8.1	0	200	130	.3	.20
17...	1430	7.9	0	120	50	.2	6.0
JAN.							
10...	1910	8.1	0	110	40	.2	3.6
17...	1505	7.3	0	160	55	.2	3.5
FEB.							
14...	1625	7.4	0	190	110	.2	2.0
17...	1645	7.9	0	93	53	.1	2.8
MAR.							
13...	1640	7.5	0	76	26	.2	3.9
30...	1305	7.9	0	130	35	.2	2.2
APR.							
13...	1450	7.7	0	150	56	.2	.50
18...	1000	7.9	0	89	24	.2	2.3
MAY							
11...	0940	7.9	0	85	20	.2	2.1
29...	1300	8.2	0	150	40	.2	.40
JUNE							
06...	1320	--	--	--	--	--	--
27...	1815	8.4	8	170	72	.2	8.8
30...	1700	7.0	0	88	33	.2	8.7
JULY							
03...	1610	7.1	0	80	23	.2	8.4
31...	1405	8.4	5	150	56	.2	1.1
AUG.							
01...	1500	--	--	--	--	--	--
04...	1635	8.4	8	150	59	.2	.60
20...	1245	7.8	0	63	28	.2	1.4
SEP.							
06...	--	--	--	--	--	--	--
11...	1010	8.4	8	140	53	.2	.30
28...	1330	7.1	0	66	18	.2	1.7

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (1971-72): Maximum, 1,270 micromhos Nov. 18, 19, 1971; minimum, 271 micromhos Apr. 14, 1972.
Water temperatures (1971-72): Maximum, 33.0°C July 24, 1972; minimum, freezing point on seveeal days during winter period.

REMARKS.--Continuous water-quality recorder operated since April 1969. Maximum recorded specific conductance value of 1,630 micromhos occurred Sept. 9, 12, 1971. Minimum recorded specific conductance value of 170 micromhos occurred July 13, 1969. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
13...	--	--	--	--	--	<.5	8.0
13...	1.8	636	350	190	1010	--	--
14...	1.0	606	340	180	939	--	--
NOV.							
01...	.9	610	350	170	1010	--	--
18...	.7	722	420	210	1150	--	--
DEC.							
01...	.9	654	370	220	1140	--	--
17...	26	396	230	160	592	--	--
JAN.							
10...	16	344	220	150	527	--	--
17...	15	470	310	200	744	--	--
FEB.							
14...	8.8	684	390	220	1010	--	--
17...	12	348	180	110	505	--	--
MAR.							
13...	17	240	140	95	370	--	--
30...	9.5	396	250	140	590	--	--
APR.							
13...	2.2	426	270	160	672	--	--
18...	10	278	170	94	419	--	--
MAY							
11...	9.2	252	160	9	395	--	--
29...	1.5	420	280	130	683	--	--
JUNE							
06...	--	--	--	--	--	33	6.0
27...	39	574	360	210	865	--	--
30...	38	328	200	120	507	--	--
JULY							
03...	37	288	170	58	404	--	--
31...	4.8	532	340	160	782	--	--
AUG.							
01...	--	--	--	--	--	43	--
04...	2.6	536	350	160	795	--	--
20...	6.4	250	130	58	369	--	--
SEP.							
06...	--	--	--	--	--	1.7	--
11...	1.4	502	320	140	747	--	--
28...	7.5	238	160	76	368	--	--

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	828	787	1020	1010	1160	1150	482	466	818	805	---	---
2	874	789	1040	1020	1180	1160	535	482	843	818	---	---
3	926	882	1040	1030	1210	1170	568	535	855	843	---	---
4	972	926	1040	1030	1180	1020	610	568	856	848	---	---
5	979	963	1050	1040	1020	972	630	610	869	856	---	---
6	976	963	1040	1040	976	966	653	626	898	869	---	---
7	966	937	1040	1030	1030	957	667	650	927	898	572	525
8	947	923	1050	1030	1040	811	695	667	927	843	525	506
9	931	867	1050	1040	1040	811	704	639	915	905	506	450
10	867	818	1080	1050	1020	886	639	546	970	915	450	445
11	963	818	1100	1080	976	853	569	533	982	960	451	436
12	1000	963	1130	1100	861	797	539	527	995	982	442	398
13	1020	956	1170	1130	841	797	563	539	1010	992	398	381
14	1020	996	1190	1170	855	790	589	563	1020	939	400	383
15	996	945	1190	1180	799	459	632	589	939	719	403	397
16	966	956	1190	1170	623	491	685	632	719	542	437	403
17	1110	956	1190	1160	598	580	734	685	609	476	448	435
18	963	945	1270	1160	608	593	754	730	516	491	442	437
19	984	938	1270	1150	652	608	751	740	607	375	487	442
20	1050	943	1230	1160	679	652	751	740	---	---	498	484
21	1010	943	1180	1140	697	679	747	727	---	---	492	469
22	1010	953	1140	1130	715	690	727	676	---	---	521	449
23	1030	943	1220	1130	767	706	676	613	---	---	449	398
24	956	945	1160	1140	926	767	618	613	---	---	410	399
25	956	948	1170	1150	840	817	649	618	---	---	459	410
26	963	950	1170	1160	877	807	666	647	---	---	478	454
27	1080	953	1180	1160	803	779	680	666	---	---	601	478
28	977	961	1180	1170	852	760	707	680	---	---	617	541
29	987	971	1180	1150	764	754	740	707	---	---	583	526
30	1030	981	1160	1140	765	580	779	740	---	---	618	507
31	1010	987	---	---	592	473	805	779	---	---	649	537
MONTH	1110	787	1270	1010	1210	459	805	466	---	---	649	381

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	656	565	730	657	711	694	499	420	826	750	694	666
2	718	602	721	653	720	701	549	491	808	760	714	694
3	674	625	728	655	733	716	535	385	825	775	766	700
4	761	642	706	641	755	724	507	436	828	783	784	715
5	696	663	---	---	823	731	609	507	791	735	778	721
6	750	630	---	---	785	755	650	609	795	759	774	663
7	807	648	---	---	783	748	679	650	819	746	746	650
8	730	643	---	---	772	755	707	674	802	727	774	670
9	698	443	---	---	783	770	730	707	748	732	731	661
10	445	391	---	---	794	772	732	700	761	748	759	689
11	698	655	---	---	805	783	740	649	779	761	793	683
12	868	661	---	---	820	800	809	696	800	766	759	679
13	858	565	---	---	818	800	768	747	766	753	761	711
14	565	271	---	---	810	793	792	605	807	728	770	503
15	423	333	---	---	812	802	613	543	742	726	494	356
16	440	409	---	---	826	813	607	550	745	703	473	386
17	483	412	---	---	847	824	652	606	825	733	552	473
18	494	416	---	---	865	842	751	629	706	671	550	490
19	523	463	---	---	866	834	737	600	700	509	505	365
20	525	367	---	---	857	849	708	543	509	332	482	377
21	383	294	---	---	851	838	659	531	474	433	498	476
22	353	302	603	592	840	818	691	576	491	450	---	---
23	437	329	619	600	826	719	690	617	548	515	---	---
24	401	343	639	619	758	722	767	681	595	542	---	---
25	509	396	656	636	791	727	771	710	600	537	---	---
26	553	509	687	654	891	791	776	741	593	549	---	---
27	615	523	689	678	898	865	787	767	604	565	---	---
28	655	579	685	672	913	870	804	763	604	582	366	334
29	682	610	698	679	915	592	796	745	612	576	456	366
30	696	608	701	689	630	451	811	747	654	610	416	282
31	---	---	701	690	---	---	826	747	671	654	---	---
MONTH	868	271	---	---	915	451	826	385	828	332	793	282
YEAR	1270	271										

04199900 EAST BRANCH BLACK RIVER AT GRAFTON, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	18.0	14.5	13.0	1.5	0.5	5.0	3.5	0.5	0.5	---	---
2	21.0	19.0	15.0	13.0	1.5	0.0	5.5	2.5	0.5	0.5	---	---
3	21.0	19.5	13.5	11.0	0.5	0.5	2.5	1.5	0.5	0.5	---	---
4	21.5	20.5	11.0	8.0	0.5	0.5	2.0	1.5	0.5	0.5	---	---
5	20.5	19.0	8.5	7.0	1.0	0.0	1.5	0.5	0.5	0.5	---	---
6	19.5	18.0	8.0	6.5	2.0	1.0	0.5	0.5	0.5	0.5	---	---
7	18.0	16.0	6.5	4.0	3.0	2.0	0.5	0.5	0.5	0.5	4.0	1.0
8	16.0	14.0	4.0	3.0	4.5	3.0	0.5	0.0	0.5	0.5	2.0	1.0
9	15.5	14.5	3.5	3.0	5.0	4.5	0.5	0.5	0.5	0.5	1.0	0.0
10	14.5	13.5	5.0	3.0	7.5	5.0	1.0	0.5	0.5	0.5	0.5	0.0
11	14.0	13.0	5.0	4.0	9.0	6.5	2.0	1.0	0.5	0.5	1.5	0.0
12	15.5	12.0	5.5	4.0	7.0	5.0	2.0	1.5	0.5	0.5	2.5	1.5
13	13.5	11.5	6.0	4.5	5.0	4.0	2.5	1.5	0.5	0.5	4.5	2.5
14	13.5	12.5	10.5	4.5	4.0	3.0	1.5	0.5	1.0	0.5	5.0	4.5
15	13.5	12.5	8.0	5.5	6.5	3.5	0.5	0.5	0.5	0.5	5.0	3.5
16	14.0	12.5	8.0	7.0	7.0	6.5	0.5	0.5	0.5	0.5	4.0	3.0
17	14.5	13.0	7.5	6.0	7.0	5.5	0.5	0.5	0.5	0.5	4.5	4.0
18	14.5	13.5	9.0	7.0	5.0	3.0	0.5	0.5	0.5	0.5	4.0	3.0
19	14.5	13.0	10.5	7.0	3.0	2.0	0.5	0.5	0.5	0.0	4.5	3.0
20	14.0	13.5	7.5	5.5	2.5	2.0	0.5	0.5	---	---	5.5	3.5
21	15.5	14.0	6.0	3.5	3.0	2.5	0.5	0.5	---	---	7.5	4.5
22	16.5	15.5	3.5	2.0	2.5	1.5	0.5	0.5	---	---	8.0	6.5
23	16.0	15.5	2.5	1.0	1.5	0.5	0.5	0.5	---	---	6.5	4.5
24	16.0	15.5	2.5	2.0	5.5	1.5	1.0	0.0	---	---	4.0	3.0
25	15.5	15.0	3.0	1.5	3.5	2.5	1.0	0.5	---	---	4.0	1.5
26	16.0	15.0	3.0	2.0	4.5	3.5	0.5	0.5	---	---	3.5	1.0
27	16.0	15.0	2.5	2.0	6.5	4.5	0.5	0.5	---	---	6.5	3.0
28	16.5	15.5	2.5	2.0	6.5	5.5	0.5	0.5	---	---	8.0	5.0
29	15.5	14.0	2.5	2.0	5.0	3.5	0.5	0.5	---	---	7.5	5.0
30	14.5	13.5	2.5	1.5	6.0	3.5	0.5	0.5	---	---	9.0	5.0
31	15.0	13.5	---	---	5.5	5.0	0.5	0.5	---	---	7.0	4.0
MONTH	21.5	11.5	15.0	1.0	9.0	0.0	5.5	0.0	---	---	9.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	20.5	17.5	18.0	15.5	20.0	18.5	25.5	22.5	20.0	19.0
2	6.5	4.5	21.0	18.5	19.5	16.5	20.0	19.5	27.5	25.5	20.0	19.0
3	6.5	4.0	22.5	20.0	21.0	18.0	20.0	19.0	28.0	25.5	20.5	18.5
4	8.0	6.0	19.5	19.0	24.0	19.5	19.0	17.5	27.0	24.0	21.0	18.5
5	8.0	6.5	---	---	24.0	19.0	18.5	16.5	24.5	22.0	22.5	19.0
6	10.0	7.5	---	---	22.5	20.0	17.5	15.5	23.5	21.5	22.5	18.5
7	8.5	3.0	---	---	23.0	18.0	18.5	16.0	24.5	22.5	22.5	19.0
8	5.0	3.5	---	---	22.0	18.5	20.0	17.5	22.5	19.5	24.5	20.5
9	6.0	2.5	---	---	23.5	20.0	21.0	18.5	19.5	17.5	23.0	18.5
10	8.0	5.0	---	---	20.0	17.5	23.0	19.5	20.5	18.5	21.5	18.5
11	11.0	7.5	---	---	17.5	15.0	25.0	22.0	20.5	18.5	21.5	19.0
12	14.0	11.0	---	---	18.0	16.5	26.0	23.5	20.5	19.0	23.0	19.0
13	17.0	13.5	---	---	19.5	18.0	24.5	23.5	22.0	20.5	21.5	20.0
14	16.0	13.0	---	---	21.5	19.0	24.0	23.0	22.5	21.5	22.5	21.0
15	16.5	14.0	---	---	23.0	21.5	24.5	23.0	24.5	22.5	23.0	20.0
16	15.0	13.5	---	---	24.0	20.5	25.5	23.0	23.0	20.0	20.0	19.0
17	16.5	13.0	---	---	22.0	20.0	26.0	23.5	23.5	21.5	23.5	19.5
18	16.5	13.5	---	---	22.0	18.5	28.0	24.5	24.5	22.5	22.5	18.5
19	19.0	15.5	---	---	22.0	19.5	28.0	25.0	25.0	23.5	22.0	21.5
20	18.0	12.0	---	---	23.0	21.5	28.0	25.5	25.5	22.5	24.0	20.5
21	13.0	11.0	---	---	23.0	19.0	30.5	26.0	25.0	23.0	21.0	20.0
22	12.0	9.5	23.5	22.0	19.0	15.5	32.0	27.0	26.5	25.0	---	---
23	13.0	10.5	24.0	20.0	15.5	13.5	30.5	27.5	27.0	24.0	---	---
24	14.0	11.0	24.5	20.5	14.0	13.5	33.0	27.5	27.0	24.5	---	---
25	13.5	11.0	24.0	20.5	14.5	13.5	28.5	26.0	26.0	24.5	---	---
26	14.5	13.0	23.5	19.5	16.5	14.5	26.0	24.0	25.5	23.5	---	---
27	16.5	13.0	22.5	19.0	19.0	15.5	24.0	23.0	24.5	23.0	---	---
28	16.5	14.0	23.0	18.5	20.5	17.5	23.0	21.0	23.5	22.0	18.5	17.0
29	16.5	14.5	23.0	19.0	20.0	19.0	23.5	21.0	22.5	20.0	18.5	17.0
30	18.0	15.5	21.5	20.0	19.0	18.5	24.5	21.5	21.0	17.5	18.0	15.0
31	---	---	20.0	16.5	---	---	25.0	22.0	20.0	18.0	---	---
MONTH	19.0	2.5	---	---	24.0	13.5	33.0	15.5	28.0	17.5	24.5	15.0
YEAR	33.0	0.0										

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO

LOCATION.--Lat 41°20'10", long 82°07'15", in T.5 N., R.16 W., Lorain County, on right abutment of private dam, 200 ft upstream from bridge on U.S. Highway 20, 4 miles upstream from confluence with East Branch, and 1.8 miles south from center of Elyria.

DRAINAGE AREA.--170 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1969 to September 1972.
Water temperatures: March 1969 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,030 micromhos Feb. 15; minimum, 177 micromhos Sept. 18.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	PH (UNITS)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)
OCT.							
01...	1600	7.0	0	110	46	.4	2.9
13...	1205	--	--	--	--	--	--
22...	1745	7.2	0	81	57	.5	14
NOV.							
10...	1800	8.4	6	100	59	.5	2.5
27...	1230	8.2	0	120	63	.6	8.1
DEC.							
02...	1645	7.5	0	110	63	.5	7.4
08...	2215	6.9	0	91	42	.2	5.6
JAN.							
01...	1500	7.7	0	130	30	.3	4.7
23...	1150	7.4	0	150	48	.3	4.6
FEB.							
15...	1230	8.4	6	180	110	.3	3.8
18...	1750	8.0	0	84	38	.1	3.2
MAR.							
17...	1735	7.1	0	87	22	.2	4.4
30...	1540	8.2	0	130	31	.2	2.6
APR.							
08...	--	7.6	0	160	38	.3	1.9
21...	1725	7.6	0	76	14	.3	2.5
MAY							
09...	1740	7.9	0	72	21	.2	2.8
30...	1722	8.4	8	140	30	.3	1.4
JUNE							
06...	1400	--	--	--	--	--	--
17...	1201	8.4	8	150	42	.4	1.9
30...	1413	7.1	0	94	27	.2	7.1
JULY							
25...	1752	7.3	0	120	41	.4	1.4
28...	1743	8.5	8	140	47	.4	1.8
AUG.							
01...	1400	--	--	--	--	--	--
02...	1430	8.4	5	140	44	.4	1.2
24...	1230	8.1	0	68	20	.3	1.9
SEP.							
06...	1400	--	--	--	--	--	--
12...	1719	7.3	0	86	30	.4	1.2
19...	1705	7.9	0	55	13	.2	2.3

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO--Continued

EXTREMES.--Period of record:
Specific conductance (March to September 1969, October 1970 to September 1972): Maximum, 1,030 micromhos Feb. 15, 1972; minimum, 168 micromhos Feb. 23, 1971.
Water temperatures (March to September 1969, October 1970 to September 1971): Maximum, 28.5°C June 26, 1971; minimum, freezing point on many days during winter period.

REMARKS.--Continuous water-quality recorder operated since March 1969. Maximum recorded water temperature of 32.0°C occurred July 23, 1972. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records availabel.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
01...	13	380	210	48	631	--	--
13...	--	--	--	--	--	<.5	15
22...	60	430	230	84	792	--	--
NOV.							
10...	11	444	230	62	698	--	--
27...	36	490	230	76	798	--	--
DEC.							
02...	33	450	230	92	736	--	--
08...	25	334	190	120	504	--	--
JAN.							
01...	21	360	240	160	559	--	--
23...	20	440	290	180	687	--	--
FEB.							
15...	17	650	360	210	1010	--	--
18...	14	292	170	110	448	--	--
MAR.							
17...	19	268	180	120	408	--	--
30...	12	392	270	150	601	--	--
APR.							
08...	8.3	452	310	170	692	--	--
21...	11	244	160	78	367	--	--
MAY							
09...	12	230	150	76	366	--	--
30...	6.4	426	320	140	681	--	--
JUNE							
06...	--	--	--	--	--	22	8.0
17...	8.3	498	340	140	776	--	--
30...	31	296	210	120	489	--	--
JULY							
25...	6.4	420	290	120	662	--	--
28...	7.9	498	330	140	766	--	--
AUG.							
01...	--	--	--	--	--	1.3	--
02...	5.5	472	320	130	714	--	--
24...	8.5	250	160	72	380	--	--
SEP.							
06...	--	--	--	--	--	<.5	--
12...	5.4	356	230	74	546	--	--
19...	10	208	130	60	307	--	--

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	665	618	---	---	798	791	565	484	741	719	641	576
2	690	630	---	---	796	787	510	546	756	741	576	406
3	724	658	---	---	796	787	546	532	785	756	439	406
4	729	694	---	---	789	785	540	528	850	780	480	439
5	724	689	---	---	793	787	572	537	857	838	527	480
6	720	698	---	---	802	742	595	574	---	---	553	527
7	713	701	---	---	783	570	659	595	---	---	573	553
8	722	705	---	---	685	501	668	642	---	---	578	518
9	729	711	---	---	618	499	594	592	---	---	547	511
10	720	707	---	---	---	---	675	483	---	---	568	540
11	746	698	---	---	---	---	524	476	---	---	575	561
12	744	681	---	---	---	---	521	497	---	---	589	564
13	722	672	---	---	---	---	514	509	---	---	621	365
14	739	689	---	---	759	572	524	506	---	---	372	333
15	731	676	---	---	619	472	556	518	1030	972	431	213
16	---	---	765	750	592	556	680	556	903	493	457	422
17	---	---	746	750	605	559	704	680	519	460	423	407
18	---	---	818	746	674	598	725	704	484	432	442	418
19	---	---	772	737	679	658	745	714	457	425	474	442
20	---	---	789	772	659	634	763	745	480	455	499	474
21	---	---	807	789	652	601	763	692	516	477	531	499
22	---	---	810	798	674	629	692	648	556	511	547	465
23	---	---	815	805	676	661	692	639	568	553	465	432
24	---	---	823	815	670	654	639	578	593	568	469	437
25	---	---	830	823	683	663	578	556	607	593	504	469
26	---	---	836	823	681	656	594	560	639	600	529	504
27	---	---	833	823	685	647	628	594	663	634	558	529
28	---	---	828	825	696	672	641	620	683	650	576	558
29	---	---	828	815	705	665	659	641	652	595	592	575
30	---	---	820	798	720	330	690	669	---	---	614	589
31	---	---	---	---	477	421	719	690	---	---	632	612
MONTH	---	---	---,	---	802	330	763	476	---	---	641	213

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	647	629	634	610	798	703	592	456	695	678	453	430
2	658	634	656	614	812	796	522	461	694	678	468	441
3	667	658	667	625	815	805	562	520	715	689	475	461
4	674	656	667	650	820	810	621	514	704	694	489	475
5	689	674	676	650	820	807	613	511	702	670	504	487
6	696	674	687	669	820	711	615	576	709	666	512	499
7	701	670	687	676	718	703	579	560	698	681	518	512
8	703	667	689	443	726	705	579	569	678	666	597	515
9	681	656	623	379	726	709	610	579	672	606	549	527
10	705	665	---	---	737	718	651	615	654	606	626	548
11	724	679	---	---	737	705	688	655	652	641	579	560
12	705	678	553	487	729	698	728	688	655	643	621	568
13	705	674	558	488	729	718	756	730	663	648	606	570
14	694	670	587	522	752	731	769	680	676	655	639	368
15	676	259	609	506	765	746	745	702	687	657	605	368
16	380	312	566	522	755	733	754	734	689	670	432	380
17	416	342	641	517	765	748	765	754	685	390	492	375
18	465	416	595	527	774	759	773	355	583	470	314	177
19	487	465	679	514	787	763	577	373	546	243	471	289
20	501	384	661	534	787	746	591	543	452	251	466	344
21	390	345	---	---	763	744	594	517	468	437	467	413
22	385	328	605	592	757	735	655	547	468	391	626	455
23	382	330	627	605	737	366	664	629	433	363	588	481
24	433	382	639	614	483	402	715	594	402	374	---	---
25	488	433	647	636	---	---	730	648	425	381	---	---
26	525	490	661	645	555	492	728	706	432	195	---	---
27	550	522	676	649	595	420	741	711	343	295	---	---
28	589	548	685	654	634	545	771	739	383	343	---	---
29	603	584	692	672	670	594	760	726	395	380	---	---
30	627	603	698	676	533	477	721	689	417	395	---	---
31	---	---	763	698	---	---	691	682	432	417	---	---
MONTH	724	259	763	379	820	366	773	355	715	195	---	---
YEAR	1030	177										

04200400 WEST BRANCH BLACK RIVER NEAR ELYRIA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	18.0	---	---	---	---	4.0	3.0	1.0	1.0	1.5	1.0
2	21.0	18.5	---	---	---	---	3.5	3.0	1.5	1.0	5.5	2.0
3	23.0	18.5	---	---	---	---	3.0	2.5	1.5	1.5	3.0	2.0
4	23.0	20.5	---	---	---	---	2.5	2.0	1.5	1.5	2.0	1.0
5	22.0	18.5	---	---	---	---	2.0	1.5	1.5	1.0	1.0	1.0
6	20.0	17.5	---	---	---	---	1.5	0.5	---	---	2.0	1.0
7	17.5	16.0	---	---	---	---	1.0	1.0	---	---	3.0	1.0
8	17.0	15.0	---	---	---	---	1.5	1.0	---	---	3.0	2.5
9	16.5	15.0	---	---	---	---	1.5	1.0	---	---	2.5	1.0
10	15.0	14.0	---	---	---	---	1.5	0.5	---	---	1.5	1.0
11	14.5	13.5	---	---	---	---	2.5	1.5	---	---	2.0	1.0
12	15.5	13.0	---	---	---	---	2.5	2.0	---	---	4.0	2.5
13	15.0	13.5	---	---	---	---	2.5	2.0	---	---	5.5	4.0
14	15.5	14.0	---	---	5.0	3.5	2.0	1.5	---	---	6.0	5.5
15	14.5	13.5	---	---	6.5	3.5	2.0	1.0	0.5	0.5	5.5	4.0
16	---	---	9.5	9.0	6.5	6.5	1.5	1.0	0.5	0.0	5.5	4.0
17	---	---	9.5	8.5	6.5	4.5	1.5	1.0	0.5	0.5	5.5	5.0
18	---	---	10.0	8.5	4.5	2.5	1.5	1.0	0.5	0.5	5.0	4.0
19	---	---	13.0	10.0	2.5	1.5	1.5	1.0	0.5	0.0	4.5	3.5
20	---	---	12.5	11.5	2.0	1.5	1.5	1.0	0.5	0.0	5.5	4.0
21	---	---	11.5	10.0	3.0	2.0	1.0	1.0	0.5	0.5	8.0	5.5
22	---	---	9.5	8.5	2.5	2.0	1.5	1.0	1.0	0.5	8.5	7.0
23	---	---	8.5	7.5	2.0	1.5	1.5	1.0	0.5	0.5	7.0	4.5
24	---	---	7.5	7.5	2.0	1.5	1.5	1.0	0.5	0.5	4.5	3.5
25	---	---	8.0	7.0	2.5	2.0	2.0	1.0	0.5	0.5	3.5	2.5
26	---	---	7.5	7.5	3.0	2.5	1.0	0.5	1.0	0.5	4.5	2.5
27	---	---	---	---	5.5	3.0	1.0	1.0	1.0	1.0	6.0	4.0
28	---	---	---	---	5.0	4.0	1.0	1.0	1.0	1.0	7.0	6.0
29	---	---	---	---	4.5	3.5	1.0	1.0	1.0	1.0	6.5	6.0
30	---	---	---	---	7.0	4.5	1.0	1.0	---	---	6.5	5.5
31	---	---	---	---	6.5	4.5	1.0	1.0	---	---	6.5	5.0
MONTH	---	---	---	---	---	---	4.0	0.5	---	---	8.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	19.0	16.5	18.5	17.5	22.0	17.5	28.0	22.5	25.0	24.5
2	6.5	6.0	21.0	18.5	17.5	17.0	25.5	15.5	25.5	21.5	25.0	24.5
3	7.0	6.0	21.0	20.5	17.5	17.0	23.0	17.0	24.0	19.5	24.5	24.0
4	8.0	6.5	20.5	16.0	18.0	17.0	22.5	17.5	23.0	17.5	23.5	22.0
5	8.5	7.0	16.0	15.0	18.5	17.5	20.0	15.0	23.5	18.0	23.0	22.5
6	10.0	8.0	18.5	15.0	21.5	18.0	---	---	23.0	19.0	23.0	20.5
7	9.0	7.0	17.5	16.0	21.5	17.0	---	---	22.0	20.0	24.0	22.0
8	7.0	5.5	17.0	12.5	20.0	16.5	---	---	21.0	19.5	20.0	19.0
9	7.0	4.5	13.5	11.0	21.0	15.5	---	---	19.5	16.5	19.5	19.0
10	8.5	6.0	---	---	20.0	16.0	---	---	---	---	19.5	18.5
11	11.5	8.0	---	---	18.5	15.5	---	---	---	---	19.5	19.0
12	13.0	11.5	18.5	17.0	19.0	17.0	---	---	---	---	19.5	19.0
13	16.5	11.0	18.0	16.0	23.5	19.5	---	---	---	---	21.0	19.0
14	17.0	16.0	19.0	16.5	23.5	21.0	---	---	---	---	20.5	19.5
15	16.0	12.0	18.5	16.0	24.0	21.0	---	---	---	---	20.0	19.5
16	16.0	14.5	17.5	15.0	22.0	18.0	---	---	---	---	19.5	18.5
17	15.0	13.5	17.0	14.5	23.5	19.5	---	---	---	---	19.5	19.0
18	16.5	14.5	21.5	14.0	23.0	17.0	24.5	21.0	---	---	20.5	18.0
19	17.5	15.5	23.0	16.5	24.5	20.0	22.0	16.0	---	---	20.5	16.5
20	17.0	13.0	22.0	17.5	25.0	19.0	24.5	20.5	---	---	19.0	17.5
21	13.0	12.0	---	---	26.0	20.5	24.5	23.0	---	---	19.0	18.0
22	12.5	11.5	20.0	19.0	22.5	20.5	31.0	24.5	---	---	19.0	18.0
23	14.5	12.5	20.0	18.5	21.0	15.0	32.0	30.5	---	---	18.0	16.5
24	14.5	14.0	20.5	19.5	15.5	13.0	31.5	27.0	24.0	22.0	16.5	15.5
25	14.5	13.0	20.5	19.5	16.5	13.0	29.0	25.5	25.0	23.0	16.5	15.5
26	15.0	13.0	21.5	19.5	18.0	13.0	27.5	24.0	25.5	22.5	19.0	16.0
27	16.0	13.5	20.5	19.5	21.5	16.5	25.5	18.0	25.0	24.0	19.5	18.0
28	15.5	14.0	20.0	19.5	23.5	16.5	24.0	16.5	24.5	23.5	18.0	15.5
29	16.0	15.0	20.0	19.5	23.0	18.5	25.5	21.0	24.5	24.0	17.5	16.0
30	16.5	16.0	21.5	20.0	23.5	19.0	29.5	18.0	24.5	24.0	17.0	13.0
31	---	---	20.0	18.5	---	---	28.5	21.5	24.5	24.0	---	---
MONTH	17.5	4.5	23.0	11.0	26.0	13.0	---	---	---	---	25.0	13.0

04200550 BLACK RIVER BELOW ELYRIA, OHIO

LOCATION.--Lat 41°24'42", long 82°05'45", in T.6 N., R.17 W., Lorain County, at Ford Road bridge on north edge of Elyria, 0.7 mile downstream from Elyria sewage disposal plant, and 5.2 miles downstream from gaging station at Elyria.

DRAINAGE AREA.--412 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1972.
Water temperatures: January 1966 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,500 micromhos Nov. 3-6, 10, 11; minimum, 167 micromhos Sept. 18.

Period of record:
Specific conductance (January to September 1966, 1967-68, 1969-70, 1971-72): Maximum, 1,500 micromhos on many days during 1966, 1970, and 1971; minimum, 167 micromhos Sept. 18, 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT.									
10...	1235	31	128	0	160	140	.4	4.8	21
13...	1345	--	--	--	--	--	--	--	--
24...	1725	8.0	248	18	180	130	.8	.10	.2
NOV.									
14...	1325	8.4	70	0	210	180	.5	22	95
28...	1235	12	78	0	170	140	.3	18	81
DEC.									
04...	1525	21	163	0	160	140	.5	16	70
18...	1345	253	103	0	140	60	.2	8.4	37
JAN.									
02...	1025	397	82	0	110	36	.3	4.5	20
30...	1445	80	100	0	150	74	.3	7.8	35
FEB.									
14...	1730	96	358	0	160	280	.4	1.5	6.8
20...	1430	391	78	0	95	46	.2	4.0	18
MAR.									
12...	1345	279	82	0	120	48	.3	7.1	31
19...	1115	800	84	0	90	30	.2	4.4	19
APR.									
06...	1400	143	146	0	160	61	.3	4.9	22
16...	1035	1120	68	0	69	28	.2	3.6	16
MAY									
12...	1030	352	98	0	94	28	.2	4.2	18
29...	1800	29	120	0	140	96	.4	12	52
JUNE									
06...	1520	--	--	--	--	--	--	--	--
06...	1525	30	177	0	150	120	.6	11	50
25...	1825	418	92	0	89	37	.2	11	48
JULY									
02...	1745	225	108	0	93	39	.2	7.4	32
30...	1340	25	154	4	140	97	.6	7.4	33
AUG.									
01...	1300	--	--	--	--	--	--	--	--
15...	1855	28	98	0	240	170	.9	19	83
27...	1545	418	94	0	52	19	.2	2.0	9.0
SEP.									
10...	1210	15	122	0	160	120	.8	11	51
18...	1530	5310	72	0	27	7.2	.1	1.6	7.2

DATE	TIME	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
13...	1345	2	250	27	0	120	560	15	4	0	210
NOV.											
21...	1430	--	--	4	--	--	--	--	--	--	--

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (January to September 1966): Maximum, 15.0 mg/l on several days during April to June 1966; minimum, 0.0 mg/l June 3, 5, 6, July 3, 4, 1966.
Water temperatures (1966-68, 1969-70): Maximum, 29.5°C Aug. 1, 1970; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since January 1966. Maximum recorded water temperature of 30.5°C occurred June 28, 1971. Specific conductance values listed as 1,500 micromhos represent values of 1,500 micromhos or greater, due to instrument limitations. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. The quality of the water is affected by sewage disposal and industrial waste. Records of discharge are given for Black River at Elyria, Ohio (station 04200500, drainage area 396 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
10...	.92	2.8	628	230	126	1060	8.0	--	--
13...	--	--	--	--	--	--	--	.5	23
24...	5.6	17	636	240	7	1200	8.3	--	--
NOV.									
14...	4.1	12	800	240	180	1330	7.7	--	--
28...	1.8	5.7	648	260	200	1020	7.7	--	--
DEC.									
04...	3.0	9.4	714	280	150	1180	6.8	--	--
18...	.090	.27	446	250	170	675	7.3	--	--
JAN.									
02...	.22	.67	322	200	130	496	7.8	--	--
30...	.83	2.6	520	280	200	782	7.9	--	--
FEB.									
14...	1.2	3.6	896	320	26	1470	7.1	--	--
20...	.50	1.4	338	170	110	496	7.8	--	--
MAR.									
12...	.40	1.2	392	230	160	592	7.0	--	--
19...	.17	.53	292	180	110	447	7.7	--	--
APR.									
06...	.14	.45	498	290	170	776	7.4	--	--
16...	.58	1.8	246	130	74	355	7.9	--	--
MAY									
12...	.17	.52	294	180	100	457	7.1	--	--
29...	.80	2.5	536	270	170	883	7.0	--	--
JUNE									
06...	--	--	--	--	--	--	--	<.5	19
06...	1.4	4.3	610	280	130	1030	8.2	--	--
25...	.20	.62	314	200	120	512	7.8	--	--
JULY									
02...	.74	2.2	334	210	120	513	7.7	--	--
30...	2.5	7.6	526	260	130	877	8.5	--	--
AUG.									
01...	--	--	--	--	--	--	--	.6	--
15...	2.4	7.4	796	270	190	1210	8.2	--	--
27...	.57	1.7	218	120	43	314	7.5	--	--
SEP.									
10...	1.7	5.4	602	250	150	1010	7.2	--	--
18...	.69	2.1	100	70	11	166	7.4	--	--

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1110	1050	1220	1050	1050	940	510	450	---	---	730	670
2	1090	990	1360	1220	1130	1000	510	470	---	---	680	430
3	1300	1020	1500	1310	1150	1050	570	500	---	---	440	420
4	1370	1150	1500	1290	1170	1130	620	560	---	---	490	430
5	1150	990	1500	1430	1210	1170	750	590	---	---	540	480
6	1130	670	1500	1380	1190	850	740	680	---	---	590	510
7	1150	670	1340	1190	940	750	780	690	---	---	640	590
8	1350	1140	1360	1170	840	720	760	700	---	---	630	520
9	1340	860	1470	1360	940	700	770	670	---	---	580	510
10	1140	880	1500	1400	950	800	670	520	---	---	650	560
11	1380	1000	1500	1430	990	860	530	490	---	---	620	570
12	1020	960	1460	1350	860	790	540	520	---	---	600	550
13	1130	1000	1450	1270	790	670	580	520	---	---	680	400
14	1180	1020	1350	1220	940	680	750	580	---	---	400	370
15	1260	1140	1390	1170	---	---	730	720	1180	1070	---	---
16	1150	1070	1420	1370	---	---	---	---	1120	690	---	---
17	1080	1040	1390	1330	---	---	---	---	690	560	---	---
18	1190	1020	1330	1260	---	---	---	---	560	510	---	---
19	1210	1130	1290	990	---	---	940	850	520	460	---	---
20	1270	1110	1220	1060	750	730	850	780	---	---	---	---
21	1330	1170	1300	1140	800	740	800	760	---	---	---	---
22	1460	1240	1260	1130	770	720	780	750	---	---	---	---
23	1420	1130	1310	1040	790	740	760	670	---	---	---	---
24	1240	1140	1340	1170	840	770	670	610	---	---	---	---
25	1390	1130	1180	1050	770	720	620	590	---	---	---	---
26	1480	1350	1060	1000	770	740	640	620	---	---	---	---
27	1410	1320	1110	1020	810	760	---	---	---	---	---	---
28	1390	1280	1040	990	900	810	---	---	---	---	---	---
29	1410	1260	1020	840	890	830	---	---	800	730	---	---
30	1360	1230	960	780	900	490	---	---	---	---	---	---
31	1270	1090	---	---	520	400	---	---	---	---	---	---
MONTH	1480	670	1500	780	1210	400	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	790	720	950	790	580	470	980	920	875	743
2	---	---	760	720	990	780	540	470	1100	890	909	849
3	---	---	790	760	960	870	630	530	1040	890	877	740
4	---	---	800	780	930	880	640	550	1090	900	764	705
5	---	---	780	720	1000	880	590	540	1000	920	832	729
6	---	---	770	680	1030	900	650	590	1060	940	973	759
7	---	---	710	630	1000	940	690	650	980	590	1020	864
8	---	---	710	490	1170	960	690	650	900	630	1070	962
9	---	---	500	380	1110	930	660	600	965	764	1110	1000
10	750	730	440	370	1030	910	670	640	1060	897	1090	992
11	770	720	440	390	1110	1010	730	680	1050	951	1270	1020
12	800	740	520	440	1160	1050	790	700	1170	980	1390	1210
13	800	740	540	500	1160	770	790	700	1190	1050	1380	1120
14	780	690	550	500	1010	1000	790	640	1320	1030	1060	469
15	760	720	560	520	1120	680	760	650	1380	1060	572	377
16	770	760	560	510	1120	850	700	540	1120	963	442	354
17	770	760	580	560	1050	800	560	520	1070	323	513	320
18	470	440	640	570	940	800	640	430	538	412	320	167
19	550	470	660	600	1000	940	450	330	555	333	383	174
20	550	440	680	620	1050	950	560	400	572	371	430	333
21	440	390	640	610	1000	930	640	580	582	427	547	412
22	420	390	740	600	1060	720	660	600	745	582	584	495
23	440	420	800	700	810	340	680	580	603	543	582	533
24	500	440	830	780	430	330	690	590	553	529	582	541
25	575	500	840	780	520	390	740	650	620	520	752	440
26	640	575	890	800	605	500	800	670	629	370	672	507
27	670	640	900	830	700	600	790	680	371	302	---	---
28	750	670	900	840	760	670	840	760	465	344	407	386
29	780	750	930	830	810	520	860	800	600	465	449	410
30	800	770	940	790	520	470	860	800	682	560	413	269
31	---	---	910	810	---	---	970	860	819	642	---	---
MONTH	---	---	940	370	1170	330	970	330	1380	302	1390	167
YEAR	1500	167										

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.6	2.5	1.4	0.7	---	---	14.2	13.0	---	---	---	---
2	5.0	3.0	0.7	0.7	---	---	13.1	12.7	---	---	---	---
3	5.8	4.0	1.2	0.0	---	---	13.6	13.1	---	---	---	---
4	4.7	3.9	0.3	0.0	---	---	13.2	12.9	---	---	---	---
5	3.7	2.1	0.6	0.0	---	---	13.8	13.1	---	---	---	---
6	2.7	2.2	0.3	0.0	---	---	14.1	13.6	---	---	---	---
7	3.3	2.3	---	---	---	---	13.8	13.4	---	---	---	---
8	2.7	2.4	---	---	---	---	14.7	13.5	---	---	---	---
9	---	---	---	---	---	---	13.8	12.8	---	---	---	---
10	---	---	---	---	---	---	14.3	13.5	---	---	---	---
11	5.1	4.1	---	---	---	---	15.0	13.5	---	---	---	---
12	5.0	4.0	---	---	---	---	14.6	13.7	---	---	---	---
13	5.0	3.2	---	---	---	---	13.7	12.2	---	---	---	---
14	4.1	2.8	---	---	---	---	12.8	12.2	---	---	---	---
15	3.3	1.3	---	---	---	---	12.9	12.7	13.8	13.0	---	---
16	2.9	1.3	---	---	---	---	---	---	14.5	13.2	---	---
17	2.9	1.6	---	---	---	---	---	---	14.5	13.9	---	---
18	2.3	0.3	---	---	---	---	---	---	14.3	13.9	---	---
19	---	---	---	---	---	---	---	---	15.0	13.3	---	---
20	---	---	---	---	12.5	11.5	---	---	---	---	---	---
21	---	---	---	---	12.1	11.7	---	---	---	---	---	---
22	---	---	---	---	12.8	12.1	---	---	---	---	---	---
23	---	---	---	---	13.1	12.4	---	---	---	---	---	---
24	---	---	---	---	12.5	12.1	---	---	---	---	---	---
25	---	---	---	---	12.6	11.8	---	---	---	---	---	---
26	---	---	---	---	11.9	11.2	---	---	---	---	---	---
27	---	---	---	---	11.6	10.7	---	---	---	---	---	---
28	---	---	---	---	11.8	10.8	---	---	---	---	---	---
29	---	---	---	---	12.6	11.8	---	---	---	---	---	---
30	---	---	---	---	12.6	11.1	---	---	---	---	---	---
31	1.7	1.2	---	---	13.9	12.6	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	4.5	3.9
2	---	---	---	---	---	---	---	---	---	---	4.3	3.9
3	---	---	---	---	---	---	---	---	---	---	4.2	3.0
4	---	---	---	---	---	---	---	---	---	---	4.1	3.2
5	---	---	9.4	8.1	---	---	---	---	---	---	4.9	3.8
6	---	---	9.5	7.7	---	---	---	---	---	---	4.8	4.0
7	---	---	11.8	7.1	---	---	---	---	---	---	5.5	3.5
8	---	---	9.1	7.7	---	---	---	---	5.3	3.4	4.4	2.9
9	---	---	10.0	8.5	---	---	---	---	5.2	3.2	3.7	1.5
10	13.6	6.6	10.5	8.6	---	---	---	---	4.8	2.7	5.4	2.9
11	---	---	9.6	8.2	---	---	---	---	4.2	2.9	4.9	3.5
12	---	---	8.7	6.7	---	---	---	---	5.2	3.0	3.8	2.0
13	---	---	7.2	6.2	---	---	---	---	5.6	3.2	3.2	0.9
14	---	---	6.3	6.0	---	---	---	---	5.3	2.9	5.4	1.3
15	---	---	7.2	6.1	---	---	---	---	6.6	1.8	6.5	5.4
16	---	---	7.5	6.5	---	---	---	---	5.6	3.5	6.6	6.0
17	---	---	7.0	6.5	---	---	---	---	7.1	4.0	6.4	5.7
18	10.9	8.6	7.0	5.4	---	---	---	---	6.7	5.1	8.2	6.4
19	8.8	6.1	5.8	4.3	---	---	---	---	6.5	5.2	7.3	6.4
20	6.1	5.2	5.0	4.0	---	---	---	---	9.1	6.9	6.5	5.6
21	---	---	6.5	4.2	---	---	---	---	8.3	6.6	5.7	4.3
22	---	---	6.5	4.2	---	---	---	---	6.9	5.9	4.3	3.1
23	---	---	8.7	5.0	---	---	---	---	6.5	5.4	3.2	2.3
24	---	---	8.2	3.4	---	---	---	---	5.5	4.0	6.7	2.5
25	---	---	5.7	1.8	---	---	---	---	5.4	4.7	5.3	2.8
26	---	---	3.6	1.0	---	---	---	---	6.9	4.8	5.1	3.6
27	---	---	---	---	---	---	---	---	7.5	6.6	---	---
28	---	---	---	---	---	---	---	---	6.9	5.5	8.3	7.9
29	---	---	---	---	---	---	---	---	6.6	4.2	8.3	7.7
30	---	---	---	---	---	---	---	---	4.2	4.0	9.9	7.8
31	---	---	---	---	---	---	---	---	5.2	4.0	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	9.9	0.9

04200550 BLACK RIVER BELOW ELYRIA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	26.0	21.5	20.0	16.5	6.0	4.0	3.5	3.0	---	---	3.5	1.5
2	26.5	22.0	20.5	18.5	6.0	3.5	3.5	2.5	---	---	4.0	3.0
3	26.5	22.5	18.5	15.0	5.5	2.0	3.0	1.5	---	---	3.0	2.5
4	26.5	22.0	15.5	11.0	6.5	2.0	2.5	1.5	---	---	2.0	1.5
5	25.0	21.5	15.0	10.5	---	---	1.5	0.5	---	---	1.5	1.0
6	---	---	14.0	11.0	---	---	1.0	0.0	---	---	3.0	1.0
7	---	---	13.0	7.0	---	---	1.5	0.5	---	---	4.5	3.0
8	---	---	13.0	8.0	---	---	1.5	0.0	---	---	4.0	1.5
9	---	---	11.0	6.5	7.0	5.5	2.5	0.5	---	---	2.0	1.0
10	---	---	12.5	8.0	10.0	7.0	1.0	0.5	---	---	3.5	1.5
11	---	---	13.5	9.0	10.5	8.0	1.5	1.0	---	---	5.5	2.0
12	---	---	13.5	9.5	8.0	6.0	2.5	1.0	---	---	6.0	5.0
13	18.0	15.5	13.5	9.5	7.0	5.5	3.0	2.0	---	---	7.0	5.0
14	18.5	15.5	14.5	9.5	6.5	4.0	2.0	0.5	---	---	8.0	7.0
15	19.5	14.5	16.5	13.0	---	---	0.5	0.0	1.0	0.0	---	---
16	19.5	16.5	15.0	11.5	---	---	---	---	0.0	0.0	---	---
17	20.5	17.0	14.5	10.0	---	---	---	---	0.0	0.0	---	---
18	21.0	17.0	16.0	11.0	---	---	---	---	0.5	0.0	---	---
19	20.5	16.0	16.5	11.5	---	---	3.5	2.5	0.0	0.0	---	---
20	21.0	16.0	11.5	9.5	4.5	4.5	3.5	2.5	---	---	---	---
21	22.0	18.0	11.0	7.5	4.5	4.0	3.5	3.0	---	---	---	---
22	21.5	19.5	9.0	5.5	4.0	3.0	5.0	3.0	---	---	---	---
23	22.0	20.0	8.5	4.0	3.5	1.5	4.5	3.0	---	---	---	---
24	21.5	20.5	9.5	5.0	4.5	3.5	4.5	2.5	---	---	---	---
25	21.0	19.5	8.5	5.0	5.0	3.0	4.5	2.0	---	---	---	---
26	22.0	19.0	9.5	5.5	6.5	5.0	2.0	2.0	---	---	---	---
27	21.0	18.0	8.5	7.0	8.0	5.0	---	---	---	---	---	---
28	20.5	17.0	9.0	6.5	8.0	4.5	---	---	---	---	---	---
29	19.5	15.5	11.0	6.0	5.0	3.0	---	---	3.0	1.5	---	---
30	19.5	15.5	8.0	5.5	5.5	4.0	---	---	---	---	---	---
31	20.5	17.0	---	---	5.0	3.5	---	---	---	---	---	---
MONTH	---	---	20.5	4.0	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	18.5	14.5	20.5	18.5	24.5	22.0	24.5	22.0
2	---	---	23.0	18.5	20.0	16.0	20.5	19.5	24.5	23.0	23.5	22.0
3	---	---	20.5	18.5	20.5	18.0	20.0	18.5	24.5	23.0	22.0	20.5
4	---	---	19.0	16.0	23.5	19.0	19.0	18.0	24.0	21.0	22.0	19.0
5	---	---	17.0	15.0	23.0	18.0	18.0	17.0	23.5	19.0	22.0	18.5
6	---	---	19.0	13.5	20.5	19.0	19.5	15.5	23.5	19.5	22.0	18.5
7	---	---	17.0	14.5	23.0	17.5	25.5	16.0	22.0	19.5	22.0	19.5
8	---	---	14.5	11.5	24.0	18.5	20.5	17.5	21.5	19.5	21.5	21.0
9	---	---	11.5	10.0	20.5	19.0	21.5	18.0	20.5	19.0	22.0	19.5
10	8.5	7.0	11.5	9.5	19.5	16.5	23.5	19.0	22.0	17.5	21.5	18.5
11	11.0	6.5	13.5	10.5	19.5	14.5	25.5	21.0	22.0	18.5	21.0	19.5
12	13.0	8.5	16.0	12.5	19.5	17.0	24.0	23.0	22.0	20.5	21.5	20.5
13	16.0	11.0	16.0	13.5	21.5	18.0	24.5	23.0	24.5	21.0	22.5	21.0
14	14.5	12.0	17.5	14.5	24.5	20.5	25.5	22.0	24.0	22.0	22.0	19.5
15	---	---	16.5	15.5	23.5	21.5	25.0	23.0	24.5	23.0	19.5	19.0
16	---	---	16.0	15.5	23.5	20.0	25.0	23.0	23.5	21.0	19.0	18.5
17	---	---	16.5	15.5	22.5	19.5	26.0	22.0	23.0	21.5	19.5	18.5
18	16.0	14.0	18.5	14.5	23.0	15.5	27.5	23.5	23.0	22.0	19.5	18.5
19	16.5	14.5	20.5	16.0	23.5	19.5	24.5	22.5	23.0	22.0	20.0	19.5
20	16.0	13.0	19.0	17.0	23.0	21.0	27.0	23.5	22.5	22.5	19.5	19.0
21	13.5	12.0	21.5	16.5	21.5	18.5	29.0	25.0	23.5	22.5	19.5	18.5
22	14.0	13.0	22.0	18.0	18.5	14.5	29.0	26.0	23.5	22.5	19.0	17.0
23	15.5	13.5	23.0	18.0	14.5	12.0	29.5	26.0	23.0	22.5	17.5	16.5
24	17.0	15.0	24.0	19.0	13.5	13.0	27.0	25.5	24.5	21.5	17.5	16.5
25	20.5	15.5	23.0	19.0	14.5	13.5	27.0	24.0	25.5	23.5	19.5	17.5
26	22.5	15.5	22.5	18.0	16.5	14.5	25.0	22.5	24.0	23.0	19.5	18.5
27	---	---	22.5	17.0	19.5	15.5	23.0	21.0	23.5	22.5	---	---
28	---	---	22.0	17.0	20.0	17.0	24.0	20.5	23.0	21.5	17.0	16.5
29	---	---	22.5	18.0	19.5	18.5	24.0	20.5	24.0	21.5	16.5	16.0
30	---	---	21.0	18.0	19.0	18.5	25.0	20.0	24.0	21.0	16.5	14.0
31	---	---	19.0	16.0	---	---	25.5	21.0	24.5	21.0	---	---
MONTH	---	---	24.0	9.5	24.5	12.0	29.5	15.5	25.5	17.5	24.5	14.0

04201500 ROCKY RIVER NEAR BEREA, OHIO

LOCATION.--Lat 41°24'24", long 81°53'14", in T.6 N., R.15 W., Cuyahoga County, at gaging station on right bank at downstream side of Cedar Point Road Bridge in Rocky River Reservation just downstream from confluence of East and West Branches, and 3.0 miles northwest of Berea. Sediment samples taken at bridge 2,400 ft downstream.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-72 (partial-record station).
Sediment records: July 1969 to September 1971 (partial-record station), October 1971 to September 1972.

EXTREMES.--1971-72:
Sediment concentrations: Maximum daily, 1,850 mg/l Apr. 15; minimum daily, 1 mg/l Nov. 12-14.
Sediment discharges: Maximum daily, 24,900 tons Apr. 15; minimum daily, 0.05 ton Nov. 12.

REMARKS.--Flow affected by ice Jan. 5, 6, 14-21, Jan. 30 to Feb. 14. Some regulation at low flow by small reservoirs on East Branch.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
09...	1120	18	--	--	--	--	--	--	--
JAN., 1972									
12...	1050	300	--	--	100	68	--	1.6	6.9
MAR.									
07...	1250	211	--	--	99	98	--	1.9	8.4
14...	1015	2960	--	--	--	--	--	--	--
APR.									
15...	1530	5370	--	--	--	--	--	--	--
MAY									
12...	1320	202	--	--	--	--	--	--	--
JUNE									
24...	1035	1320	--	--	74	25	--	8.1	36
29...	1630	6160	--	--	--	--	--	--	--
JULY									
21...	1235	74	--	--	--	--	--	--	--
31...	1155	28	182	0	130	120	.4	2.1	9.5
SEP.									
06...	1145	22	--	--	--	--	--	--	--
19...	1110	1480	--	--	--	--	--	--	--

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
09...	--	--	--	--	--	843	--	6.0
JAN., 1972								
12...	--	--	--	200	--	595	7.1	2.0
MAR.								
07...	--	--	--	210	--	699	7.9	2.0
14...	--	--	--	--	--	--	--	6.5
APR.								
15...	--	--	--	--	--	--	--	11.0
MAY								
12...	--	--	--	--	--	534	--	16.0
JUNE								
24...	--	--	--	160	--	420	8.0	14.0
29...	--	--	--	--	--	--	--	--
JULY								
21...	--	--	--	--	--	583	--	27.0
31...	.96	3.0	556	270	120	903	7.8	23.0
SEP.								
06...	--	--	--	--	--	752	--	18.5
19...	--	--	--	--	--	295	--	20.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAR. 14, 1972	1015	6.5	2960	398	3180	39	51	63	78	89	95	98	100	--	--	--
APR. 15......	1530	11.0	5370	2080	30200	47	62	73	83	90	93	96	98	100	--	--
JUNE 29......	1630	--	6160	1420	23600	43	60	75	89	98	98	99	100	--	--	--

04201500 ROCKY RIVER NEAR BEREA, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	17	6	.28	284	45	35
2	--	--	--	18	4	.19	130	28	9.8
3	--	--	--	16	3	.13	85	18	4.1
4	--	--	--	20	3	.16	54	15	2.2
5	--	--	--	17	3	.14	50	15	2.0
6	--	--	--	18	3	.15	218	39	39
7	--	--	--	19	3	.15	1040	183	514
8	--	--	--	17	3	.14	908	153	375
9	--	--	--	19	4	.21	316	93	79
10	--	--	--	20	3	.16	198	54	29
11	--	--	--	19	2	.10	218	55	32
12	--	--	--	20	1	.05	214	57	33
13	--	--	--	21	1	.06	136	56	21
14	26	18	1.3	21	1	.06	244	74	73
15	21	18	1.0	22	2	.12	1640	316	1400
16	20	16	.86	23	2	.12	884	149	404
17	17	14	.64	23	2	.12	311	52	44
18	15	12	.49	22	3	.18	187	35	18
19	15	11	.45	39	3	.32	140	29	11
20	16	10	.43	31	3	.25	169	27	12
21	17	9	.41	36	3	.29	330	36	32
22	18	9	.44	40	3	.32	226	37	23
23	17	10	.46	32	3	.26	133	28	10
24	20	12	.65	29	4	.31	108	21	6.1
25	20	14	.76	28	4	.30	92	20	5.0
26	20	15	.81	26	4	.28	102	20	5.5
27	20	17	.92	42	3	.34	152	20	8.2
28	19	19	.97	75	3	.61	202	24	13
29	19	18	.92	119	13	5.9	190	26	13
30	17	14	.64	385	54	56	1290	250	1350
31	16	10	.43	--	--	--	1600	240	1160
TOTAL	--	--	--	1234	--	67.70	11851	--	5762.9

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	435	96	113	50	7	.95	1380	37	138
2	317	73	62	44	8	.95	3180	341	3000
3	344	58	54	55	16	2.4	1300	201	806
4	256	44	30	65	22	3.9	595	82	132
5	220	33	20	75	16	3.2	373	55	55
6	190	27	14	65	9	1.6	216	41	24
7	184	23	11	60	7	1.1	262	36	25
8	135	19	6.9	55	7	1.0	1090	192	569
9	251	33	28	50	7	.95	448	100	121
10	807	88	192	46	7	.87	262	52	37
11	501	42	57	44	7	.83	207	31	17
12	289	25	20	42	8	.91	415	42	47
13	207	28	16	50	8	1.1	2750	494	4470
14	180	28	14	120	9	2.9	2880	391	3330
15	140	24	9.1	550	10	15	1320	172	613
16	110	22	6.5	938	11	28	1130	134	409
17	95	20	5.1	409	12	13	1620	185	809
18	90	18	4.4	422	14	16	965	62	162
19	100	16	4.3	428	15	17	543	37	54
20	120	14	4.5	226	17	10	355	27	26
21	160	13	5.6	197	15	8.0	317	24	21
22	221	12	7.2	391	13	14	1300	122	574
23	361	10	9.7	367	12	12	1240	108	415
24	391	9	9.5	207	10	5.6	573	29	45
25	300	8	6.5	131	9	3.2	480	22	29
26	138	7	2.6	142	9	3.5	409	17	19
27	112	6	1.8	127	8	2.7	379	14	14
28	79	6	1.3	146	8	3.2	284	12	9.2
29	74	5	1.0	657	94	196	216	10	5.8
30	65	5	.88	--	--	--	245	7	4.6
31	55	6	.89	--	--	--	211	5	2.8
TOTAL	6927	--	718.77	6159	--	369.86	26945	--	15983.4

04201500 ROCKY RIVER NEAR BEREA, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	163	4	1.8	197	10	5.3	82	29	21
2	150	3	1.2	295	10	8.0	211	84	57
3	138	2	.75	306	10	8.3	99	37	9.9
4	167	2	.90	235	10	6.3	34	30	2.8
5	167	2	.90	167	10	4.5	17	22	1.0
6	138	4	1.5	131	8	2.8	11	12	.36
7	193	8	4.2	105	6	1.7	9.5	7	.18
8	221	12	7.2	154	12	6.9	6.2	9	.15
9	180	15	7.3	1220	175	630	5.1	14	.19
10	171	15	6.9	975	96	288	7.3	19	.37
11	154	15	6.2	409	22	24	6.2	20	.33
12	123	15	5.0	202	9	4.9	3.2	19	.16
13	251	20	14	146	9	3.5	17	17	.78
14	339	21	19	216	9	5.2	25	14	.95
15	4180	1850	24900	311	50	47	66	21	3.7
16	1950	342	1800	256	32	22	150	38	17
17	1730	363	1700	193	20	10	74	19	3.8
18	739	103	206	150	15	6.1	20	15	.81
19	461	30	37	105	13	3.7	8.4	15	.34
20	2020	367	2680	69	13	2.4	3.6	13	.13
21	1340	273	1100	46	11	1.4	6.2	14	.23
22	1800	403	2190	32	9	.78	22	19	1.1
23	1170	203	698	30	8	.65	2560	501	4350
24	588	72	114	18	8	.39	1330	220	873
25	397	32	34	20	8	.43	1120	88	266
26	295	18	14	17	8	.37	673	42	76
27	231	14	8.7	13	8	.28	322	26	23
28	180	11	5.3	8.4	7	.16	180	25	12
29	150	10	4.1	4.0	7	.08	3450	761	10900
30	135	10	3.6	20	7	.38	2720	415	3860
31	--	--	--	44	7	.83	--	--	--
TOTAL	19921	--	35571.55	6094.4	--	1096.35	13238.7	--	20482.28

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	681	125	230	29	10	.78	46	20	2.5
2	367	42	42	25	10	.68	37	16	1.6
3	1230	165	615	27	10	.73	58	13	2.0
4	799	88	190	30	10	.81	46	11	1.4
5	467	49	62	27	10	.73	30	10	.81
6	588	29	46	25	10	.68	25	9	.61
7	355	19	18	105	63	23	24	8	.52
8	226	13	7.9	71	28	5.4	25	6	.41
9	202	11	6.0	60	18	2.9	24	4	.26
10	251	10	6.8	46	17	2.1	22	3	.18
11	240	8	5.2	39	16	1.7	20	3	.16
12	146	8	3.2	30	15	1.2	--	--	--
13	112	8	2.4	27	15	1.1	--	--	--
14	135	8	2.9	--	--	--	--	--	--
15	119	9	2.9	--	--	--	--	--	--
16	95	10	2.6	105	42	12	--	--	--
17	216	10	5.8	610	178	316	--	--	--
18	295	68	147	--	--	--	--	--	--
19	714	271	610	--	--	--	1480	171	784
20	171	86	40	--	--	--	508	69	95
21	71	56	11	--	--	--	250	36	24
22	44	44	5.2	--	--	--	184	21	10
23	44	37	4.4	--	--	--	--	--	--
24	48	30	3.9	--	--	--	--	--	--
25	39	26	2.7	--	--	--	--	--	--
26	32	22	1.9	--	--	--	--	--	--
27	48	18	2.3	--	--	--	--	--	--
28	50	15	2.0	221	64	38	--	--	--
29	46	13	1.6	119	43	14	--	--	--
30	39	12	1.3	79	32	6.8	--	--	--
31	32	11	.95	60	25	4.1	--	--	--
TOTAL	7902	--	2082.95	--	--	--	--	--	--

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO

LOCATION.--Lat 41°08'08", long 81°32'50", Summit County, at gaging station on right bank 230 ft upstream from North Portage Path Bridge at Old Portage, 1.2 miles downstream from Little Cuyahoga River, and 4 miles northwest of Akron City Hall. Sampling site at North Portage Path Bridge.

DRAINAGE AREA.--404 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1966-67, 1969-70 (partial-record station); October 1970 to September 1972.
Water temperatures: October 1970 to September 1972.
Sediment records: March 1972 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 2,130 micromhos Nov. 21; minimum, 160 micromhos Sept. 18.
pH: Maximum, 8.4 Dec. 17; minimum, 4.4 Jan. 27.
Dissolved oxygen: Maximum, 14.5 mg/l Mar. 9; minimum, 0.2 mg/l Aug. 19.
Water temperatures: Maximum, 31.0°C July 14; minimum, freezing point Jan. 16, 31.
Sediment concentrations: Maximum daily, 444 mg/l June 29; minimum daily, 4 mg/l on several days during August.
Sediment discharges: Maximum daily, 1,460 tons June 29; minimum daily, 0.82 ton Sept. 11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
01...	1020	146	148	0	80	77	.2	1.7
20...	1415	--	--	--	--	--	--	--
31...	2020	71	182	0	98	110	.3	2.1
NOV.								
21...	2045	117	156	0	94	270	.3	3.1
28...	2040	216	150	0	78	110	.2	2.2
DEC.								
12...	1945	912	80	0	60	37	.1	2.0
28...	1400	416	94	0	71	180	.2	2.4
JAN.								
03...	1630	1000	78	0	54	38	.2	1.2
19...	1325	268	114	0	73	70	.2	1.8
FEB.								
01...	0920	206	114	0	71	65	.1	1.8
16...	2110	395	116	0	72	160	.2	2.1
MAR.								
01...	1140	714	104	0	68	73	.2	1.9
19...	1910	1600	62	0	48	32	.1	1.4
APR.								
13...	1400	683	96	0	69	70	.2	1.8
23...	2100	1440	78	0	51	28	.2	.90
MAY								
10...	2030	780	100	0	61	38	.2	1.3
29...	2100	115	156	0	87	77	.3	2.0
JUNE								
05...	1515	144	162	0	91	100	.3	2.2
05...	1600	--	--	--	--	--	--	--
26...	1130	383	138	0	70	54	.2	1.8
JULY								
15...	2000	683	100	0	54	37	.2	1.4
30...	2030	146	157	0	76	64	.3	1.9
AUG.								
02...	2100	148	167	0	85	77	.3	2.0
03...	0845	--	--	--	--	--	--	--
13...	2130	95	176	0	100	100	.3	2.3
SEP.								
03...	2110	77	185	7	110	110	.3	2.5
07...	1520	--	--	--	--	--	--	--
20...	0900	476	127	0	52	33	.2	1.3

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

EXTREMES.--Continued
Period of record:
Specific conductance: Maximum, 2,710 micromhos Feb. 5, 1971; minimum, 160 micromhos Sept. 18, 1972.
pH (1971-72): Maximum, 8.4 Dec. 17, 1971; minimum, 4.4 Jan. 27, 1972.
Dissolved oxygen (1971-72): Maximum, 14.5 mg/l Mar. 9, 1972; minimum, 0.2 mg/l Aug. 19, 1972.
Water temperatures: Maximum, 32.0°C July 9, 1971; minimum, freezing point Jan. 16, 31, 1972.
Sediment concentrations: Maximum daily, 444 mg/l June 29, 1972; minimum daily, 4 mg/l on several days during August 1972.
Sediment discharges: Maximum daily, 1,460 tons June 29, 1972; minimum daily, 0.82 ton Sept. 11, 1972.

REMARKS.--Continuous water-quality recorder operated since October 1970. Maximum recorded pH of 8.6 occurred Apr. 23, 25, 27, May 4, 1971. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected four times during the year to further define the quality of water. Natural flow of stream affected by diversons, storage reservoirs and power plants.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.							
01...	7.4	408	240	120	638	--	--
20...	--	--	--	--	--	<.5	8.0
31...	9.2	532	290	140	845	--	--
NOV.							
21...	14	702	260	130	1260	--	--
28...	10	424	230	110	741	--	--
DEC.							
12...	8.8	222	140	74	383	--	--
28...	10	484	170	93	868	--	--
JAN.							
03...	5.4	220	130	66	368	--	--
19...	7.8	352	190	96	566	--	--
FEB.							
01...	8.1	332	190	96	548	--	--
16...	9.4	524	200	100	856	--	--
MAR.							
01...	8.5	352	170	85	565	--	--
19...	6.1	208	120	69	316	--	--
APR.							
13...	7.8	330	160	82	530	--	--
23...	4.0	204	130	66	324	--	--
MAY							
10...	5.6	272	150	68	414	--	--
29...	8.7	420	240	110	675	--	--
JUNE							
05...	9.8	442	250	120	693	--	--
05...	--	--	--	--	--	--	7.0
26...	8.0	332	200	87	541	--	--
JULY							
15...	6.3	246	180	98	402	--	--
30...	8.4	380	230	100	603	--	--
AUG.							
02...	8.8	410	250	110	674	--	--
03...	--	--	--	--	--	<.5	--
13...	10	504	290	140	827	--	--
SEP.							
03...	11	546	320	160	855	--	--
07...	--	--	--	--	--	<.5	--
20...	5.8	242	170	66	416	--	--

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	662	524	911	791	615	534	393	351	585	558	597	552
2	636	503	969	708	552	528	426	369	600	573	546	504
3	683	533	948	777	540	522	408	366	759	591	528	464
4	755	674	987	864	522	510	387	360	768	657	464	390
5	764	740	960	870	519	510	546	384	735	696	392	366
6	740	641	918	876	609	477	480	444	855	663	---	---
7	767	590	945	852	513	432	447	432	789	720	432	[illegible]
8	719	617	966	894	438	405	450	426	747	693	434	[illegible]
9	770	527	930	894	411	390	498	438	693	624	464	392
10	795	564	918	891	462	378	486	462	642	624	486	440
11	833	779	924	897	389	369	489	450	681	612	446	408
12	819	744	933	879	396	376	486	462	918	627	504	402
13	769	712	894	870	405	387	492	462	1030	714	504	408
14	755	671	909	876	507	395	657	492	1260	840	426	392
15	773	686	945	903	432	390	573	537	1020	825	392	342
16	767	707	960	906	405	360	549	537	981	801	392	308
17	779	689	957	903	399	354	561	531	846	735	---	---
18	759	624	990	909	516	378	618	531	741	666	---	---
19	736	658	990	753	540	411	618	567	708	621	---	---
20	704	657	931	888	447	417	573	546	723	527	---	---
21	719	593	2130	882	429	414	558	537	759	654	---	---
22	731	593	1710	957	429	408	702	537	729	621	---	---
23	788	728	1340	1120	438	399	558	504	666	621	---	---
24	788	623	1120	1020	441	417	525	489	798	666	---	---
25	812	674	1030	963	450	429	507	486	744	699	---	---
26	773	662	963	876	447	432	501	480	735	696	---	---
27	803	734	891	822	504	447	507	483	723	654	---	---
28	869	767	822	747	897	492	663	507	678	639	---	---
29	911	785	753	654	984	744	609	573	634	597	---	---
30	896	791	702	603	975	429	585	561	---	---	---	---
31	914	806	---	---	450	351	576	549	---	---	---	---
MONTH	914	503	2130	603	984	351	702	351	1260	558	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		[illegible]	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	470	430	780	420	470	400	660	620	840	780
2	---	---	470	410	740	530	460	400	710	590	820	790
3	---	---	490	400	730	690	490	320	700	600	860	810
4	---	---	480	450	720	640	460	400	690	650	860	820
5	501	483	460	430	790	660	460	420	700	640	860	780
6	513	480	510	430	760	750	480	410	685	620	820	800
7	504	477	520	430	800	720	460	400	700	640	840	820
8	522	492	520	430	820	729	460	400	720	620	880	840
9	528	501	440	410	820	650	530	370	775	710	880	840
10	530	504	450	380	770	710	500	300	770	750	880	820
11	540	500	460	360	800	740	520	440	770	740	890	830
12	550	470	460	400	760	710	540	510	770	740	840	470
13	670	450	460	390	740	360	560	520	830	670	820	200
14	540	510	480	410	780	660	580	540	800	700	640	360
15	530	310	440	360	780	460	580	390	800	750	680	590
16	350	270	460	440	740	660	530	400	810	740	590	540
17	320	310	460	380	700	660	540	500	790	560	620	460
18	340	280	500	400	680	620	540	440	820	750	510	160
19	420	310	510	450	650	590	500	390	820	470	430	350
20	350	320	520	500	650	630	440	400	780	720	420	370
21	350	300	560	490	690	570	440	420	780	760	490	400
22	340	290	570	510	620	550	420	400	780	670	500	440
23	320	250	580	520	580	480	440	400	800	760	520	460
24	310	290	590	540	620	550	500	400	800	780	520	500
25	340	290	670	570	570	540	540	500	800	780	510	490
26	360	290	680	620	600	530	580	530	800	420	530	250
27	370	330	700	620	610	520	---	---	780	700	500	430
28	370	330	740	660	560	260	580	570	800	720	450	430
29	370	350	760	640	480	220	590	540	810	780	520	450
30	440	360	840	560	480	400	610	550	820	760	500	300
31	---	---	720	650	---	---	660	590	800	760	---	---
MONTH	670	250	840	360	820	220	660	300	830	420	890	160
YEAR	2130	160										

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.6	8.0	7.0	7.8	7.5	7.6	7.6	7.7	7.6	7.6	7.2
2	7.8	7.6	7.5	7.2	8.1	7.3	7.6	7.4	7.8	7.6	---	---
3	7.9	7.6	7.6	7.0	8.0	7.9	7.6	7.5	8.0	7.6	---	---
4	7.9	7.6	7.6	7.2	7.9	7.7	7.7	7.6	7.7	7.6	---	---
5	8.0	7.7	7.8	7.4	7.8	7.6	7.8	7.6	7.7	7.6	---	---
6	8.0	7.6	7.5	7.2	7.8	7.2	7.9	7.6	7.6	7.6	---	---
7	7.8	7.5	7.5	7.1	8.1	7.8	7.7	7.6	7.7	7.6	8.3	7.5
8	7.9	7.7	7.4	7.0	7.9	7.7	7.6	7.5	7.8	7.6	7.9	7.8
9	8.2	7.4	7.3	7.0	7.9	7.2	7.6	7.6	7.7	7.6	8.3	7.7
10	7.6	7.4	7.4	7.1	8.0	7.6	7.6	7.6	7.7	7.6	7.9	7.8
11	7.8	7.5	7.5	7.2	7.6	7.2	7.6	7.6	7.8	7.6	7.9	7.8
12	7.8	7.5	7.5	7.2	7.6	7.5	7.7	7.6	7.7	7.6	---	---
13	7.8	7.4	7.5	7.2	8.0	7.5	7.6	7.6	7.6	7.5	---	---
14	7.7	7.3	7.4	7.3	8.0	7.6	7.6	7.6	7.8	7.6	---	---
15	7.7	7.4	7.5	7.2	7.9	7.6	7.6	7.6	7.8	7.6	---	---
16	7.7	7.3	7.5	7.2	8.3	7.7	7.6	7.5	7.7	7.6	---	---
17	7.7	7.3	7.4	7.2	8.4	7.7	7.6	7.6	7.9	7.6	---	---
18	7.7	7.3	7.5	7.1	7.7	7.6	7.6	7.5	7.8	7.6	---	---
19	7.6	7.3	7.4	7.2	7.6	7.5	7.6	7.6	7.7	7.6	---	---
20	7.8	7.3	7.3	7.2	7.8	7.5	7.6	7.6	7.8	7.6	---	---
21	7.9	7.2	7.3	7.1	7.6	7.5	7.8	7.6	7.8	7.6	---	---
22	7.4	7.4	7.4	7.1	8.1	7.4	7.7	7.5	7.8	7.6	---	---
23	7.7	7.2	7.4	7.2	7.7	7.5	7.7	7.6	7.7	7.6	---	---
24	7.7	7.0	7.3	7.2	7.6	7.4	7.7	7.6	7.8	7.6	---	---
25	7.7	7.0	7.3	7.1	7.5	7.4	7.7	7.6	7.8	7.6	---	---
26	7.8	7.1	7.2	7.1	7.5	7.3	7.7	7.6	7.8	7.6	---	---
27	8.0	7.2	7.6	7.1	7.5	7.4	7.6	4.4	7.9	7.6	---	---
28	7.8	7.1	7.1	7.0	7.9	7.3	7.7	7.6	7.8	7.6	---	---
29	7.8	7.1	7.3	6.9	7.8	7.5	7.6	7.6	7.8	7.6	---	---
30	7.9	7.0	7.6	7.0	7.9	7.4	7.7	7.6	---	---	---	---
31	7.9	7.4	---	---	8.1	7.6	7.7	7.6	---	---	---	---
MONTH	8.2	7.0	8.0	6.9	8.4	7.2	7.9	4.4	8.0	7.5	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.9	7.8	7.5	7.4	7.5	6.9	7.5	7.4	7.4	7.3
2	---	---	7.9	7.8	7.5	7.4	7.4	6.9	7.5	7.4	7.4	7.3
3	---	---	7.9	7.8	7.5	7.4	7.4	6.7	7.4	7.4	7.4	7.3
4	---	---	7.9	7.9	7.6	7.4	7.6	6.9	7.4	7.3	7.4	7.3
5	7.8	7.3	8.0	7.9	7.7	7.4	7.6	7.4	7.5	7.4	7.4	7.3
6	7.5	7.2	8.0	7.9	7.5	7.4	7.5	7.4	7.4	7.4	7.4	7.3
7	7.9	7.2	8.0	7.8	7.5	7.4	7.7	7.4	7.4	7.4	7.6	7.3
8	7.6	7.3	7.9	7.8	7.7	7.4	7.5	7.4	7.4	7.4	7.6	7.6
9	7.7	7.3	7.9	7.5	7.5	7.4	7.5	7.4	7.4	7.4	7.6	7.5
10	8.1	7.3	7.6	7.5	7.5	7.4	7.5	7.3	7.5	7.4	7.6	7.5
11	8.1	7.9	7.7	7.5	7.6	7.1	7.6	7.4	7.5	7.4	7.6	7.5
12	7.9	7.8	7.6	7.5	7.5	7.4	7.6	7.4	7.5	7.4	7.6	7.5
13	8.0	7.9	7.7	7.5	7.5	7.4	7.5	7.4	7.5	7.3	7.6	7.5
14	7.9	7.6	7.6	7.5	7.6	7.3	7.5	7.4	7.6	7.3	7.7	7.5
15	7.9	7.8	7.5	7.5	7.6	7.5	7.5	7.4	7.6	7.4	7.9	7.5
16	7.9	7.8	7.5	7.5	7.6	7.5	7.5	7.4	7.6	7.3	8.0	7.5
17	7.9	7.7	7.5	7.4	7.8	7.5	7.5	7.4	7.4	7.3	7.6	7.5
18	8.0	7.8	7.8	7.4	7.6	7.5	7.5	7.4	7.5	7.4	7.6	7.5
19	7.9	7.8	7.6	7.5	7.5	7.4	7.5	7.4	7.4	7.3	7.6	7.5
20	7.9	7.5	7.5	7.4	7.5	7.4	7.6	7.4	7.4	7.3	7.6	7.5
21	8.0	7.8	7.7	7.4	7.5	7.4	7.6	7.4	7.5	7.3	7.6	7.5
22	7.9	7.8	7.6	7.5	7.9	7.4	7.5	7.4	7.4	7.3	7.6	7.5
23	8.0	7.9	7.6	7.5	7.7	7.5	7.5	7.4	7.3	7.3	7.8	7.5
24	7.9	7.9	7.6	7.4	7.5	7.5	7.5	7.4	7.5	7.3	7.7	7.5
25	7.9	7.9	7.5	7.4	7.5	7.5	7.5	7.4	7.4	7.4	7.6	7.5
26	8.0	7.9	7.6	7.5	7.5	7.4	7.7	7.5	7.5	7.3	7.5	7.5
27	7.9	7.9	7.5	7.4	7.9	7.4	---	---	7.4	7.3	7.5	7.4
28	8.0	7.9	7.6	7.4	7.7	6.8	7.5	7.4	7.4	7.3	7.6	7.2
29	7.9	7.8	7.5	7.4	7.5	7.0	7.8	7.4	7.4	7.3	7.6	7.5
30	8.0	7.8	7.5	7.4	7.5	6.9	7.5	7.4	7.4	7.3	7.8	7.1
31	---	---	7.5	7.4	---	---	7.5	7.4	7.5	7.3	---	---
MONTH	8.1	7.2	8.0	7.4	7.9	6.8	7.8	6.7	7.6	7.3	8.0	7.1
YEAR	8.4	.4										

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 to SEPEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.6	5.8	6.5	5.0	11.3	10.4	11.0	10.5	11.3	10.8	12.2	11.2
2	6.5	5.9	6.0	4.0	12.4	11.0	11.3	9.6	11.4	10.2	12.6	12.1
3	6.8	5.9	6.9	5.6	11.2	10.8	11.7	11.3	10.8	10.0	13.0	12.2
4	7.1	6.0	7.9	6.2	11.2	10.9	11.9	11.4	11.6	10.8	13.3	8.3
5	6.9	5.6	8.0	6.8	11.4	10.9	11.9	11.5	11.9	11.4	8.7	6.8
6	6.5	5.9	7.9	6.4	11.2	9.8	12.2	11.7	11.9	11.3	---	---
7	6.6	5.3	8.6	6.6	10.6	9.1	12.0	11.6	12.4	11.6	12.4	11.6
8	6.8	6.4	8.0	6.7	11.0	10.5	12.3	11.7	12.2	11.6	12.2	11.5
9	6.6	5.5	7.3	6.4	11.2	11.0	12.0	11.6	12.1	11.6	14.5	12.0
10	6.4	5.6	7.4	6.2	11.0	10.2	12.3	11.6	12.2	11.0	14.3	13.8
11	6.5	5.6	7.4	6.3	10.4	10.1	11.9	11.1	11.8	11.0	13.9	13.4
12	6.6	5.6	7.1	5.3	10.9	10.0	11.6	11.2	12.0	10.9	13.4	12.7
13	7.1	5.6	6.7	5.2	11.0	10.6	11.6	11.3	11.9	11.0	13.3	12.8
14	5.8	5.5	7.1	5.3	10.8	10.2	11.9	11.2	12.1	11.4	13.5	12.8
15	6.5	5.6	7.1	5.5	10.6	10.1	12.1	11.8	11.8	11.4	13.9	13.5
16	---	---	7.5	5.5	10.3	9.9	12.5	11.9	12.2	11.4	13.6	12.8
17	6.3	5.8	7.6	5.4	10.2	9.9	12.7	12.1	12.4	11.6	---	---
18	7.3	5.7	6.9	5.2	10.5	10.0	12.0	11.2	12.5	11.5	---	---
19	6.9	5.8	5.2	2.9	11.7	10.1	11.5	11.1	12.2	11.6	---	---
20	6.9	5.6	5.9	4.7	11.7	11.2	11.3	10.7	12.6	12.0	---	---
21	6.8	4.4	6.7	4.6	11.5	11.1	11.3	10.6	12.5	11.3	---	---
22	5.6	4.3	7.9	6.1	12.2	11.3	10.7	9.3	11.8	11.3	---	---
23	5.6	4.3	7.5	6.1	12.0	11.4	11.7	9.7	11.6	10.8	---	---
24	5.3	4.2	7.8	6.9	11.6	11.2	12.0	10.7	11.9	11.1	---	---
25	5.4	4.3	8.4	7.2	11.6	11.0	12.0	10.5	11.7	10.8	---	---
26	5.6	4.3	9.0	8.1	11.4	10.9	11.9	11.5	11.6	10.9	---	---
27	5.2	4.2	8.4	8.1	11.3	10.1	11.9	11.0	11.9	11.4	---	---
28	5.4	4.2	9.2	8.4	10.5	9.5	11.9	11.5	12.0	11.3	---	---
29	6.0	4.1	10.2	9.0	10.2	9.3	12.2	11.4	11.9	11.1	---	---
30	5.2	4.1	11.6	10.2	10.4	9.2	12.3	11.7	---	---	---	---
31	5.6	4.2	---	---	11.0	10.4	12.2	11.0	---	---	---	---
MONTH	7.3	4.1	11.6	2.9	12.4	9.1	12.7	9.3	12.6	10.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.3	7.5	7.5	4.2	7.7	7.0	7.5	5.0	7.0	3.7
2	---	---	9.0	7.4	6.8	5.5	8.0	7.2	7.3	2.4	6.5	3.6
3	---	---	9.0	6.9	7.1	5.3	7.9	5.8	7.2	4.3	6.0	3.6
4	---	---	8.6	7.3	7.4	5.4	8.1	7.8	8.1	4.4	7.1	3.9
5	10.8	10.1	9.7	7.4	7.7	5.1	8.2	7.8	8.6	5.4	7.7	3.9
6	10.8	9.8	10.0	7.4	7.4	5.2	8.2	7.5	8.4	5.1	6.9	3.6
7	10.6	9.8	9.9	7.4	8.4	5.1	8.3	7.2	8.0	4.3	8.7	4.0
8	11.6	10.4	9.0	6.8	8.2	5.0	7.7	6.7	8.0	3.5	6.7	4.2
9	11.8	10.6	9.0	7.8	8.1	2.8	7.7	6.2	7.8	4.8	8.2	3.9
10	11.7	9.4	9.7	8.6	8.6	3.4	6.8	5.9	8.4	5.0	8.5	4.9
11	12.8	9.1	9.5	8.1	9.2	5.4	6.6	5.4	8.0	4.9	7.9	4.8
12	14.0	10.6	9.2	7.9	9.2	4.6	6.9	5.0	7.6	4.1	6.4	3.2
13	11.6	9.3	8.8	7.9	6.4	3.9	6.2	4.8	7.9	4.2	6.6	0.5
14	11.8	10.0	8.6	7.8	7.8	4.6	6.0	4.8	8.4	4.3	7.0	5.5
15	11.3	10.0	8.4	5.7	6.8	4.5	5.6	3.7	8.2	2.8	7.1	6.1
16	11.9	11.3	8.0	7.3	7.4	5.0	5.9	4.6	8.4	3.8	7.1	6.0
17	11.7	10.7	8.2	7.0	6.5	5.3	6.4	5.4	4.3	2.7	6.7	4.4
18	10.8	9.3	8.1	7.0	7.2	4.4	6.8	6.4	5.8	2.3	7.4	4.5
19	9.4	8.5	8.0	6.5	8.1	5.8	5.8	3.2	4.0	0.2	8.0	7.5
20	9.7	8.6	8.1	6.2	7.4	6.2	5.2	4.2	5.7	2.9	7.8	7.1
21	10.0	9.6	8.1	6.2	6.5	5.4	4.8	3.8	6.1	3.2	7.7	6.9
22	9.8	9.7	8.5	5.9	6.4	5.4	4.6	3.4	5.4	2.5	7.6	6.9
23	9.9	9.5	8.6	5.1	8.1	6.3	4.5	2.4	5.0	3.3	7.8	6.4
24	10.0	9.7	8.1	4.5	7.6	7.2	4.8	2.8	7.4	3.3	7.3	6.9
25	10.3	10.0	7.3	4.4	8.1	7.2	4.5	4.1	7.5	4.5	7.4	6.7
26	10.3	9.7	8.1	5.0	8.5	7.2	4.6	2.8	6.3	3.2	7.1	3.4
27	9.9	9.5	8.0	4.7	7.9	6.9	---	---	6.8	4.3	7.0	6.3
28	9.9	9.1	8.1	4.7	8.1	3.5	7.1	5.6	7.1	4.6	7.1	6.0
29	9.7	8.8	8.0	4.6	7.5	6.4	7.3	5.6	6.9	4.6	7.0	6.3
30	9.8	8.5	6.6	0.5	7.3	6.9	7.4	5.0	7.0	4.3	8.0	5.4
31	---	---	6.0	4.5	---	---	7.8	5.1	7.3	4.2	---	---
MONTH	14.0	8.5	10.0	0.5	9.2	2.8	8.3	2.4	8.6	0.2	8.7	0.5
YEAR	14.5	0.2										

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.0	22.5	21.0	17.5	---	---	4.0	3.0	5.5	3.0	8.0	5.5
2	27.5	24.0	22.0	19.0	7.0	6.0	4.5	3.0	7.0	5.0	8.0	3.5
3	27.0	23.5	19.5	16.0	6.5	5.0	4.0	3.0	8.0	6.0	3.5	1.0
4	26.0	23.0	16.5	13.5	6.0	5.0	4.5	3.5	6.0	3.0	3.0	1.0
5	24.5	22.5	16.5	13.0	5.5	4.5	4.5	2.5	4.5	2.0	4.0	2.5
6	22.5	21.0	15.0	13.5	8.5	5.0	3.0	1.5	4.5	2.5	---	---
7	21.0	18.5	13.5	11.0	8.5	6.5	3.5	2.0	4.0	2.0	4.0	2.5
8	21.5	18.0	13.0	10.0	7.0	6.0	3.5	2.0	5.0	2.0	4.0	1.5
9	20.5	18.0	13.0	11.0	6.5	5.5	4.0	3.0	5.5	2.5	3.0	0.5
10	20.0	17.5	14.0	12.5	8.5	6.5	6.0	3.5	6.0	2.0	4.0	2.0
11	19.5	16.5	16.0	13.0	9.0	8.0	6.5	5.5	7.0	3.5	4.5	3.0
12	20.5	16.5	16.0	13.5	8.0	6.5	6.5	5.5	8.0	5.5	6.5	4.5
13	21.5	17.5	16.0	14.0	7.5	6.0	7.0	4.5	7.0	4.0	7.5	5.5
14	26.5	19.5	16.5	12.5	8.0	6.5	6.0	4.0	6.5	4.0	7.5	5.5
15	22.5	18.5	18.5	16.0	9.5	8.0	4.0	1.0	6.0	5.0	5.5	4.0
16	23.0	21.0	16.5	14.5	9.5	9.0	2.5	0.0	6.0	4.0	6.5	4.5
17	22.0	19.0	17.0	13.5	9.0	7.0	3.5	0.5	6.0	3.0	---	---
18	21.5	18.5	18.5	14.0	7.0	5.0	6.5	3.5	6.0	4.0	---	---
19	22.0	18.0	18.5	14.5	5.5	4.0	7.0	5.5	5.0	1.5	---	---
20	22.5	19.0	14.5	13.0	6.0	4.0	7.0	5.5	2.5	1.0	---	---
21	23.5	19.5	13.0	10.5	6.0	5.0	6.5	5.5	5.0	1.0	---	---
22	22.5	18.5	12.5	10.0	6.0	4.0	9.0	6.0	5.0	2.5	---	---
23	22.0	20.0	14.0	12.0	5.0	3.5	8.0	5.0	4.5	2.0	---	---
24	22.0	19.0	13.0	12.0	6.0	4.0	7.5	4.5	5.0	3.5	---	---
25	21.0	19.0	12.0	10.0	5.0	4.0	8.0	4.0	6.0	4.5	---	---
26	23.5	19.5	10.0	9.0	6.0	5.0	5.0	3.0	6.0	3.5	---	---
27	22.5	19.0	9.5	8.5	10.5	6.0	4.0	3.0	6.0	3.5	---	---
28	22.5	18.5	8.5	7.5	11.5	8.0	4.0	2.0	7.5	5.0	---	---
29	22.5	17.5	9.0	7.5	9.5	5.0	3.5	1.5	7.5	6.0	---	---
30	23.0	18.0	9.0	7.0	9.0	6.0	3.0	0.5	---	---	---	---
31	23.0	18.5	---	---	6.5	4.0	3.0	0.0	---	---	---	---
MONTH	27.5	16.5	22.0	7.0	11.5	3.5	9.0	0.0	8.0	1.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	19.5	16.0	25.5	18.5	23.0	17.5	27.0	23.0	29.0	24.0
2	---	---	21.5	18.5	25.5	20.5	22.5	18.5	27.0	24.5	28.0	25.0
3	---	---	21.5	18.5	28.5	22.0	20.5	16.5	28.0	25.0	26.0	23.0
4	---	---	20.0	18.0	28.5	23.0	22.0	16.5	26.5	23.5	24.0	20.0
5	10.5	9.0	23.0	16.5	28.5	20.0	21.0	17.0	27.0	20.5	23.5	18.0
6	12.5	8.5	21.0	17.0	25.5	23.0	22.5	16.5	25.0	21.0	25.5	19.0
7	10.0	8.5	19.5	17.5	29.0	21.5	23.0	18.0	26.5	22.0	25.5	20.0
8	8.5	7.0	19.0	17.0	30.0	22.0	23.5	19.5	24.0	23.0	25.0	23.0
9	9.5	6.5	18.5	15.5	28.0	24.5	24.0	19.5	23.5	21.0	24.0	21.0
10	11.5	6.5	16.0	13.5	25.0	22.0	23.5	19.0	27.0	19.5	24.0	18.5
11	13.0	8.0	18.5	14.5	25.5	19.0	28.0	21.0	26.0	23.0	24.0	19.5
12	15.0	12.5	19.5	15.5	25.5	19.5	28.5	23.5	24.0	21.5	26.5	21.0
13	16.5	13.0	19.0	17.0	26.0	21.5	29.0	26.0	27.5	21.5	29.0	20.5
14	17.0	14.5	19.5	17.0	29.5	23.0	31.0	25.0	28.5	22.0	26.0	22.5
15	16.0	10.5	21.0	18.5	28.5	25.0	29.0	25.0	27.0	24.0	24.5	21.0
16	14.0	11.0	20.0	19.0	29.0	23.5	26.5	21.5	26.5	20.5	25.0	20.5
17	14.0	11.0	20.5	18.0	28.0	25.5	29.0	21.0	28.0	23.0	26.5	21.5
18	15.0	13.5	22.5	18.5	28.5	24.0	28.0	26.0	30.0	26.0	22.0	19.0
19	16.0	14.5	25.0	19.5	30.0	23.5	28.5	25.0	29.0	23.5	20.5	19.5
20	15.5	13.0	25.0	21.0	26.5	25.5	28.5	25.0	29.0	24.0	23.0	20.5
21	13.0	12.0	25.5	21.0	26.5	23.5	28.5	26.5	29.5	24.0	23.0	19.5
22	13.0	11.5	26.5	18.5	24.5	21.0	29.5	26.0	27.5	24.5	22.0	19.5
23	13.5	12.0	28.0	18.0	21.5	19.0	30.0	26.5	27.0	25.5	19.5	18.0
24	13.5	12.0	29.5	20.0	21.0	20.0	29.5	26.5	29.5	25.5	20.0	19.5
25	13.0	11.5	29.0	21.0	20.0	18.0	28.5	26.0	29.5	26.0	21.5	19.5
26	13.5	11.5	28.0	19.5	21.0	17.0	27.0	24.5	30.0	23.0	22.5	21.0
27	14.0	12.0	28.5	19.0	22.5	17.0	---	---	28.5	25.5	22.5	19.5
28	15.5	12.0	28.0	18.5	22.5	16.5	26.0	24.0	27.0	24.0	20.0	17.0
29	16.0	12.0	28.5	18.5	22.5	15.5	26.0	21.5	28.5	23.5	21.0	19.5
30	17.0	14.0	25.5	21.5	23.0	17.0	26.5	21.0	28.5	22.0	20.0	13.0
31	---	---	25.5	22.0	---	---	28.0	21.0	29.0	23.0	---	---
MONTH	17.0	6.5	29.5	13.5	30.0	15.5	31.0	16.5	30.0	19.5	29.0	13.0
YEAR	31.0	0.0										

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, MARCH TO SEPTEMBER 1972

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							--	--	--
2							--	--	--
3							--	--	--
4							--	--	--
5							--	--	--
6							--	--	--
7							--	--	--
8							--	--	--
9							--	--	--
10							1060	22	63
11							1020	20	55
12							1060	35	105
13							1510	163	680
14							1850	79	395
15							1860	57	286
16							2080	72	404
17							2270	45	276
18							2040	35	193
19							1690	32	146
20							1450	30	117
21							1220	30	99
22							1240	39	131
23							1170	29	92
24							996	19	51
25							912	17	42
26							864	15	35
27							796	14	30
28							694	14	26
29							627	13	22
30							592	14	22
31							522	15	21
TOTAL							27523	--	3291

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	485	11	14	449	8	9.7	225	67	107
2	476	10	13	431	6	7.0	235	98	72
3	473	12	15	470	17	22	184	23	11
4	458	11	14	452	12	15	155	15	6.3
5	440	10	12	416	9	10	144	12	4.7
6	404	9	9.8	380	8	8.2	148	10	4.0
7	473	28	36	356	8	7.7	139	12	4.5
8	425	7	8.0	437	31	46	124	11	3.7
9	401	9	9.7	872	55	129	141	18	6.9
10	395	8	8.5	848	24	55	141	14	5.3
11	362	7	6.8	694	17	32	107	11	3.2
12	314	8	6.8	673	15	27	101	14	3.8
13	690	314	680	624	13	22	218	33	30
14	526	21	30	631	14	24	161	12	5.2
15	1420	211	852	589	31	55	182	38	24
16	2170	156	914	568	35	54	225	20	12
17	1790	89	430	482	22	29	240	15	9.7
18	1580	61	260	419	18	20	230	10	6.2
19	1560	62	261	359	18	17	230	6	3.7
20	2070	166	969	326	18	16	211	11	6.3
21	1710	66	305	305	19	16	206	20	11
22	1580	63	269	295	18	14	189	24	12
23	1500	31	126	189	15	7.7	341	69	69
24	1300	24	84	161	14	6.1	323	37	32
25	1100	19	56	155	10	4.2	395	28	30
26	960	17	44	148	10	4.0	383	20	21
27	812	12	26	135	10	3.6	401	22	24
28	718	9	17	122	10	3.3	832	198	1150
29	589	8	13	115	10	3.1	1030	444	1460
30	491	8	11	206	10	5.6	697	80	151
31	--	--	--	199	10	5.4	--	--	--
TOTAL	27672	--	5500.6	12506	--	678.6	8338	--	3289.5

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, MARCH TO SEPTEMBER 1972

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	589	15	24	126	7	2.4	79	17	3.6
2	488	15	20	[illegible]	7	2.3	81	11	2.4
3	784	91	216	[illegible]	7	2.3	79	6	1.3
4	554	23	34	133	4	1.4	72	6	1.2
5	561	43	72	113	4	1.2	81	5	1.1
6	506	20	27	111	6	1.8	75	5	1.0
7	446	20	24	115	5	1.6	71	5	.96
8	458	22	27	133	4	1.4	69	5	.93
9	467	48	76	119	4	1.3	69	5	.93
10	519	75	105	148	4	1.6	64	5	.86
11	401	22	24	139	4	1.5	61	5	.82
12	335	17	15	95	4	1.0	111	50	18
13	290	15	12	90	4	.97	389	349	523
14	285	15	12	103	4	1.1	533	196	296
15	413	62	83	103	4	1.1	258	35	24
16	554	55	93	109	4	1.2	161	20	8.7
17	494	16	21	213	35	21	159	26	11
18	428	22	32	159	12	5.2	1040	217	779
19	470	37	47	225	22	15	876	65	154
20	540	20	29	155	5	2.1	458	39	48
21	561	18	27	107	4	1.2	335	25	23
22	485	12	16	117	7	2.2	273	20	15
23	422	14	16	133	6	2.2	270	15	11
24	401	17	18	117	6	1.9	285	15	12
25	335	10	9.0	113	6	1.8	250	15	10
26	263	7	5.0	182	44	28	645	182	492
27	265	10	7.2	122	35	12	529	62	89
28	213	9	5.2	113	32	9.8	404	22	24
29	189	8	4.1	99	28	7.5	359	21	20
30	155	7	2.9	86	24	5.6	1450	328	1430
31	137	7	2.6	81	21	4.6	--	--	--
TOTAL	13008	--	1106.0	3907	--	144.27	9586	--	4002.80

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 102540
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 18012.77

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, MARCH TO SEPTEMBER 1972

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEM-PERA-TURE (°C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAR. 13, 1972	1210	12.0	1740	308	1450	31	35	45	57	71	81	91	96	100	--	--
MAR. 13......	1345	7.0	1620	150	656	29	41	51	63	75	82	90	96	100	--	--
APR. 20......	1015	14.0	2290	214	1320	27	38	50	62	75	85	92	97	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, MARCH TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
JUNE												
28...	1200	1	0	0	2	6	9	12	16	24	34	100
28...	1205	1	0	1	2	8	11	14	20	33	46	100
SEP.												
20...	0840	2	0	0	2	11	22	35	48	57	78	100

04207200 TINKERS CREEK AT BEDFORD, OHIO

LOCATION.--Lat 41°23'04", long 81°31'39", in T.6 N., R.11 W., Cuyahoga County, at gaging station on left bank at downstream side of bridge on State Highway 14 in Bedford, 5.5 miles upstream from mouth.

DRAINAGE AREA.--83.9 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1965-72 (partial-record station).
Sediment records: March to June 1972 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
09...	1030	24	--	--	--	--	--	--	--
JAN., 1972									
10...	1350	140	--	--	76	120	--	1.7	7.4
MAR.									
07...	1300	151	--	--	--	--	--	--	--
14...	1300	900	--	--	--	--	--	--	--
APR.									
07...	1310	86	--	--	--	--	--	--	--
13...	1115	98	--	--	--	--	--	--	--
15...	1700	886	--	--	--	--	--	--	--
15...	1735	872	--	--	45	35	--	1.5	6.6
20...	1100	542	--	--	--	--	--	--	--
22...	1215	753	--	--	--	--	--	--	--
22...	1220	739	--	--	--	--	--	--	--
MAY									
08...	1140	63	--	--	--	--	--	--	--
JUNE									
15...	1930	548	--	--	--	--	--	--	--
23...	1420	1300	--	--	--	--	--	--	--
23...	1430	1240	--	--	46	26	--	2.0	9.0
28...	1330	88	--	--	--	--	--	--	--
JULY									
10...	1155	102	--	--	--	--	--	--	--
SEP.									
12...	1405	30	--	--	--	--	--	--	--
18...	1125	795	92	0	38	26	.0	1.4	6.2

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
09...	--	--	--	--	--	764	--	5.0
JAN., 1972								
10...	--	--	--	200	--	687	7.1	2.5
MAR.								
07...	--	--	--	--	--	934	--	3.0
14...	--	--	--	--	--	--	--	5.0
APR.								
07...	--	--	--	--	--	663	--	5.5
13...	--	--	--	--	--	806	--	14.0
15...	--	--	--	--	--	--	--	14.5
15...	--	--	--	130	--	370	7.6	13.5
20...	--	--	--	--	--	424	--	12.0
22...	--	--	--	--	--	338	--	11.0
22...	--	--	--	--	--	--	--	11.0
MAY								
08...	--	--	--	--	--	605	--	14.0
JUNE								
15...	--	--	--	--	--	--	--	21.0
23...	--	--	--	--	--	--	--	12.0
23...	--	--	--	120	--	327	8.1	12.0
28...	--	--	--	--	--	--	--	19.0
JULY								
10...	--	--	--	--	--	412	--	19.5
SEP.								
12...	--	--	--	--	--	933	--	20.0
18...	.47	1.4	186	110	34	293	8.1	19.0

04207200 TINKERS CREEK AT BEDFORD, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, MARCH TO JUNE 1972

DAY	JANUARY	FEBRUARY	MARCH		
			MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1			724	--	--
2			1060	--	--
3			739	--	--
4			506	--	--
5			264	--	--
6			140	--	--
7			205	--	--
8			352	--	--
9			313	--	--
10			185	--	--
11			131	--	--
12			144	--	--
13			605	369	688
14			856	257	595
15			802	189	409
16			746	254	512
17			512	190	263
18			475	123	158
19			274	79	58
20			169	42	19
21			142	30	12
22			397	237	304
23			360	73	71
24			316	50	43
25			215	42	24
26			172	30	14
27			151	30	12
28			125	28	9.5
29			109	28	8.2
30			111	23	6.9
31			91	15	3.7
TOTAL			11393	--	3210.3

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	79	15	3.2	102	50	22	40	38	4.1
2	81	15	3.3	133	86	36	49	30	4.0
3	81	15	3.3	121	28	9.1	34	27	2.5
4	104	15	4.2	104	20	5.6	26	18	1.3
5	88	15	3.6	76	20	4.1	22	15	.89
6	73	15	3.0	59	22	3.5	20	8	.43
7	88	15	3.6	62	27	4.5	19	7	.36
8	82	20	4.4	174	154	236	16	10	.43
9	72	27	5.2	900	590	1700	20	13	.70
10	68	19	3.5	542	145	212	17	9	.41
11	67	13	2.4	352	83	79	14	11	.42
12	60	17	2.8	135	40	15	15	11	.45
13	91	37	9.1	88	20	4.8	78	207	49
14	81	19	4.2	98	28	7.4	87	160	64
15	941	721	2110	88	17	4.0	231	667	743
16	1200	790	2880	76	11	2.3	177	382	260
17	893	342	888	68	14	2.6	119	108	35
18	460	157	195	60	16	2.6	56	77	12
19	212	107	61	50	15	2.0	47	164	31
20	379	169	105	40	15	1.6	36	35	3.8
21	310	134	112	35	15	1.4	38	94	12
22	640	266	552	36	15	1.5	44	44	5.2
23	387	58	61	32	15	1.3	903	654	2140
24	271	32	23	26	15	1.1	937	612	1780
25	151	35	14	24	12	.78	501	222	361
26	115	32	9.9	21	5	.28	285	93	72
27	89	28	6.7	18	4	.19	163	63	28
28	73	23	4.5	16	4	.17	91	29	7.1
29	62	20	3.3	16	4	.17	480	728	1740
30	56	17	2.6	65	181	66	208	362	248
31	--	--	--	50	88	12	--	--	--
TOTAL	7354	--	7163.8	3667	--	2438.99	4773	--	7607.09

04207200 TINKERS CREEK AT BEDFORD, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, MARCH TO JUNE 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
						.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAR. 14, 1972	1300	5.0	900	303	736	41	50	59	72	80	89	93	97	100	--	--
APR. 15......	1700	14.5	886	482	1150	43	59	70	82	87	92	95	97	100	--	--
APR. 22......	1220	11.0	739	244	487	36	49	60	72	82	88	92	95	100	--	--
JUNE 15......	1930	21.0	548	1510	2230	35	48	62	74	89	93	98	99	100	--	--
JUNE 23......	1420	12.0	1300	798	2800	37	46	59	73	85	92	94	96	98	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACF BED MATERIAL, MARCH TO JUNE 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
JUNE 28...	1330	1	1	1	4	7	12	19	32	54	86	100
28...	1332	1	0	1	2	3	5	8	15	24	38	81

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04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO

LOCATION.--Lat 41°23'43", long 81°37'48", in T.6 N., R.12 W., Cuyahoga County, at gaging station on left bank 240 ft downstream from bridge on Old Rockside Road, 0.8 mile northeast of Independence, and 3.0 miles downstream from Tinkers Creek.

DRAINAGE AREA.--707 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, July 1965 to September 1972.
Water temperatures: October 1948 to September 1949, October 1952 to September 1972.
Sediment records: October 1950 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,900 micromhos Nov. 24; minimum, 258 micromhos June 29.
Dissolved oxygen: Maximum, 13.8 mg/l Dec. 14; minimum, 2.8 mg/l July 14.
Water temperatures: Maximum, 29.0°C July 23; minimum, 0.5°C Feb. 5, 8, 9.
Sediment concentrations: Maximum daily, 2,380 mg/l Apr. 15; minimum daily, 3 mg/l Sept. 8.
Sediment discharges: Maximum daily, 45,100 tons Apr. 15; minimum daily, 0.85 ton Sept. 8.

Period of record:
Specific conductance (1968-72): Maximum, 2,000 micromhos on several days during 1968-71; minimum, 255 micromhos Feb. 21, 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT.								
12...	1600	330	170	0	110	190	.5	3.8
19...	1430	--	--	--	--	--	--	--
29...	1120	212	184	0	130	360	.6	6.8
NOV.								
09...	1600	179	174	0	140	180	.6	4.8
18...	1600	169	176	4	160	340	.6	5.0
DEC.								
02...	1600	925	130	0	100	140	.3	2.8
16...	1600	2350	88	0	78	60	.2	2.0
JAN.								
03...	1445	1500	96	0	72	79	.2	2.0
19...	1150	770	132	0	120	300	.4	3.3
FEB.								
08...	1600	404	138	0	120	320	.4	3.8
29...	1600	1460	110	0	82	110	.3	2.7
MAR.								
01...	1200	2180	96	0	78	100	.2	2.5
16...	1600	3580	82	0	67	56	.2	2.1
APR.								
06...	1600	760	112	0	97	130	.3	3.5
20...	1600	4720	84	0	65	38	.5	2.0
MAY								
09...	1315	3950	98	0	73	41	.3	1.8
30...	--	390	160	0	140	190	.6	4.2
JUNE								
01...	1600	358	152	0	110	100	.6	3.3
05...	1745	--	--	--	--	--	--	--
29...	1600	7960	90	0	52	20	.3	1.5
JULY								
04...	1600	1080	128	0	76	44	.3	2.2
27...	1600	453	148	3	120	150	.5	5.0
AUG.								
15...	1600	169	175	0	130	100	.7	7.6
24...	1600	244	158	0	100	80	.6	4.7
SEP.								
06...	1156	126	166	0	140	110	.7	9.8
19...	1600	2100	106	0	73	35	.3	2.2

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

						PARTICLE SIZE										
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED										
DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
DEC. 30, 1971	1730	8.0	4680	1240	15700	32	42	53	66	82	91	98	100	--	--	--
FEB. 15, 1972	1500	[illegible]	1660	813	3690	34	41	55	70	89	96	99	100	--	--	--
MAR. 13......	1615	11.5	4680	1400	17700	24	35	47	60	70	82	89	94	98	100	--
APR. 15......	1900	13.0	8130	1070	23500	42	56	69	83	90	96	98	100	--	--	--
JUNE 23......	1740	14.0	6010	1080	17500	35	44	56	72	84	91	96	99	100	--	--
SEPT.26......	1305	20.5	1650	720	3210	41	54	67	79	86	91	94	97	99	100	--

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

EXTREMES.--Period of record--Continued
Dissolved oxygen (1970-72): Maximum, 13.8 mg/l Dec. 14, 1972; minimum, 1.0 mg/l Sept. 13, 1971.
Water temperatures (1948-49, 1952-67, 1968-72): Maximum, 31.0°C Aug. 18, 1949; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 4,800 mg/l Aug. 21, 1960; minimum daily, 1 mg/l Sept. 4, 10, 1955.
Sediment discharges: Maximum, 51,400 tons Mar. 5, 1964; minimum daily, 0.25 ton Sept. 4, 1955.

REMARKS.--Continuous water-quality recorder operated since July 1965. Specific conductance values reported as 2,000 micromhos represent values of 2,000 micromhos or greater, due to instrument limitations.Maximum recorded dissolved oxygen concentrations of 14.2 mg/l occurred Dec. 27, 1967 and Jan. 27, 1969. Minimum recorded dissolved oxygen concentrations of 0.0 mg/l occurred Oct. 23, 1965, Feb. 10-12, June 23, July 26, 1966. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. Natural flow of stream affected by diversions, storage reservoirs and power plants. Some diversion from the Tuscarawas drainage into this basin at Portage Lakes. Water diverted into Ohio Canal at Brecksville, 6 miles upstream from station, bypasses station. These records do not include flow in canal except above about 15,000 cfs, when channels merge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
12...	17	632	270	130	1050	7.1	--	--
19...	--	--	--	--	--	--	.9	9.0
29...	30	946	290	140	1610	8.1	--	--
NOV.								
09...	21	670	290	150	1130	7.3	--	--
18...	22	994	300	150	1680	8.3	--	--
DEC.								
02...	12	502	220	110	859	8.1	--	--
16...	8.7	286	160	88	505	7.7	--	--
JAN.								
03...	8.9	350	160	82	573	7.4	--	--
19...	15	870	250	140	1420	6.8	--	--
FEB.								
08...	17	882	270	160	1500	8.2	--	--
29...	12	452	190	100	722	7.4	--	--
MAR.								
01...	11	408	170	92	667	7.9	--	--
16...	9.4	290	130	63	467	7.3	--	--
APR.								
06...	15	486	210	120	836	7.1	--	--
20...	8.8	248	140	71	405	7.9	--	--
MAY								
09...	8.0	288	160	80	444	7.9	--	--
30...	19	688	270	140	1120	8.2	--	--
JUNE								
01...	15	586	250	120	956	7.2	--	--
05...	--	--	--	--	--	--	<.5	8.0
29...	6.6	206	130	56	297	7.7	--	--
JULY								
04...	10	322	190	85	511	8.2	--	--
27...	22	612	250	120	1010	8.3	--	--
AUG.								
15...	34	554	280	140	892	7.6	--	--
24...	21	452	240	110	735	7.4	--	--
SEP.								
06...	44	574	290	150	938	6.9	--	--
19...	10	266	160	73	442	7.8	--	--

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	1480	1250	816	758	---	---	1250	1030	757	530
2	---	---	1390	1210	911	764	---	---	1280	1120	597	509
3	---	---	1460	1230	945	879	569	531	1290	1030	649	549
4	---	---	1540	1410	949	845	621	565	1390	1040	712	538
5	---	---	1530	1230	987	847	767	621	1300	1060	538	441
6	1470	1110	1270	1150	929	539	951	707	1420	1220	491	443
7	1240	797	1240	1080	541	423	890	784	1350	1080	604	474
8	1320	1110	1310	1050	521	451	918	784	1500	1290	659	509
9	1160	822	1130	1020	557	491	948	780	1410	1190	529	486
10	963	771	1230	1050	569	519	898	726	1230	911	661	529
11	970	740	1440	1190	583	505	828	722	934	836	712	616
12	1230	970	1520	1160	557	521	858	712	1430	934	634	550
13	1330	1200	1620	1390	659	541	963	799	1620	1410	747	523
14	1390	1230	1470	1340	749	499	951	815	1570	1200	542	486
15	1400	1190	1480	1280	617	407	1100	857	1620	942	494	456
16	1330	1170	1460	1260	503	451	1120	897	1020	868	483	449
17	1400	1240	1680	1340	519	487	1080	963	1180	946	465	419
18	1440	1160	1840	1430	615	519	1250	979	1030	935	425	413
19	1380	1200	1880	1130	879	615	1460	972	1070	852	432	422
20	1450	1250	1820	1300	837	703	1100	966	950	818	448	428
21	1500	1220	1540	1200	805	633	1100	946	1210	903	500	446
22	1460	1330	1480	1210	735	643	1100	904	1190	804	516	494
23	---	---	1660	1370	753	645	1110	846	983	823	---	---
24	---	---	1900	1630	937	675	916	796	978	874	---	---
25	---	---	1640	1410	1030	860	986	812	1100	968	---	---
26	---	---	1450	1270	974	780	915	801	968	888	---	---
27	---	---	1330	1180	788	706	951	813	986	864	---	---
28	---	---	1210	1080	672	702	1080	855	938	866	---	---
29	1640	1460	1070	798	---	---	1320	981	892	676	---	---
30	1750	1440	864	674	---	---	1310	1090	---	---	---	---
31	1720	1410	---	---	---	---	1170	1000	---	---	---	---
MONTH	---	---	1900	674	1030	407	1460	531	1620	676	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	620	576	1080	822	545	491	842	808	1090	872
2	---	---	632	546	1090	664	586	540	882	842	1110	896
3	664	630	820	598	794	664	568	438	878	850	896	860
4	672	626	634	592	836	782	531	465	1020	878	892	860
5	709	649	710	622	948	836	561	504	998	868	908	876
6	843	695	670	636	883	823	562	526	898	878	948	904
7	735	651	670	626	900	846	610	556	912	790	942	916
8	703	617	684	646	906	870	676	594	806	630	940	902
9	772	703	646	436	903	859	712	594	876	796	992	912
10	703	674	459	435	948	876	606	488	886	820	1640	992
11	726	664	504	458	949	811	612	518	928	882	1470	1040
12	742	704	543	503	906	842	682	606	902	868	1040	780
13	796	656	556	524	879	743	780	650	940	874	964	558
14	812	632	589	525	903	645	788	722	936	892	572	486
15	716	352	545	497	756	562	722	680	916	882	668	532
16	410	386	586	516	645	417	710	526	1090	892	776	668
17	414	386	583	515	698	618	584	504	928	622	814	628
18	438	410	590	558	783	698	644	422	902	700	628	328
19	466	436	619	569	783	739	576	408	822	516	462	424
20	490	386	640	596	776	728	614	556	852	666	472	430
21	430	400	665	615	789	741	614	560	796	674	574	472
22	440	374	652	614	826	752	586	556	824	452	658	572
23	420	390	927	623	762	315	596	524	694	552	676	638
24	432	396	1090	905	486	388	614	482	776	658	720	642
25	468	432	970	808	517	387	660	576	820	776	652	612
26	542	468	830	800	560	514	704	646	876	810	656	432
27	502	484	842	804	647	559	1100	694	798	652	504	378
28	536	500	876	842	646	608	1100	726	718	564	530	502
29	574	518	884	834	610	258	794	728	816	718	592	530
30	594	546	1240	866	491	323	814	766	868	816	582	328
31	---	---	1220	824	---	---	816	788	898	854	---	---
MONTH	843	352	1240	435	1090	258	1100	408	1090	452	1640	328
YEAR	1900	258										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.0	5.1	12.4	11.8	---	---	9.7	8.9	11.5	10.9
2	---	---	7.6	4.9	12.9	12.1	---	---	10.9	9.2	11.8	10.5
3	---	---	7.6	5.3	12.9	11.9	13.1	12.2	10.8	10.2	12.6	11.8
4	---	---	8.1	6.4	12.8	12.0	12.2	11.7	11.4	9.8	12.6	12.3
5	---	---	8.0	5.9	12.7	12.1	12.2	11.7	11.9	11.4	12.7	12.3
6	4.7	3.6	6.9	5.9	12.6	10.5	13.1	12.2	11.7	11.2	12.8	12.3
7	5.3	4.5	7.9	6.1	11.5	10.4	12.7	11.9	11.6	11.2	12.3	11.5
8	5.2	4.7	8.1	7.0	11.9	10.3	12.4	11.8	11.9	11.4	12.1	11.4
9	6.2	4.4	10.2	7.4	12.1	11.6	11.8	11.4	12.0	11.8	12.3	10.9
10	6.3	5.3	10.3	8.6	12.3	11.0	11.8	11.3	11.8	11.6	11.9	11.6
11	6.7	6.0	10.0	7.1	12.6	11.0	11.5	10.9	11.7	11.0	11.6	10.9
12	6.7	5.7	9.8	7.4	13.0	11.4	11.1	10.4	11.0	10.3	10.9	10.6
13	5.9	5.4	10.1	7.5	13.6	12.0	11.1	9.9	10.8	9.9	11.4	9.9
14	5.4	4.9	10.1	7.6	13.8	12.2	11.3	10.6	11.4	10.0	10.9	10.4
15	5.4	3.6	8.9	7.0	13.0	10.8	11.7	11.2	11.8	10.6	11.7	10.9
16	5.1	4.5	9.6	6.7	12.4	9.6	12.0	11.5	12.0	11.4	11.4	9.3
17	5.1	4.3	10.0	7.2	10.7	10.1	11.5	10.3	11.8	11.5	10.5	10.3
18	5.6	4.5	10.4	7.3	11.0	10.6	10.3	9.7	11.5	11.1	10.8	10.3
19	5.7	4.6	8.6	6.7	11.0	10.6	10.1	9.7	11.6	10.8	10.6	9.8
20	5.0	3.7	9.1	7.7	10.7	10.6	9.9	9.5	12.1	11.6	10.5	9.2
21	5.7	3.5	11.3	8.2	10.6	10.6	9.7	9.3	12.0	11.5	9.2	8.1
22	4.1	2.9	12.9	10.4	12.4	10.0	9.6	8.9	12.1	11.5	9.1	8.3
23	---	---	13.1	11.0	12.4	12.0	9.6	8.7	12.2	11.7	---	---
24	---	---	12.7	10.3	11.9	11.0	9.9	9.5	11.7	10.9	---	---
25	---	---	11.6	9.9	11.4	11.1	10.9	9.4	11.0	10.7	---	---
26	---	---	10.8	9.0	11.3	10.6	11.2	10.5	11.0	10.6	---	---
27	---	---	9.6	8.9	10.7	10.2	10.8	10.0	11.4	10.9	---	---
28	---	---	10.2	9.4	10.4	9.8	10.1	9.7	11.1	10.5	---	---
29	7.0	5.4	10.2	9.9	---	---	10.1	9.6	11.4	10.8	---	---
30	6.5	5.1	12.4	8.7	---	---	9.9	9.4	---	---	---	---
31	7.0	5.1	---	---	---	---	9.9	9.4	---	---	---	---
MONTH	---	---	13.1	4.9	13.8	9.6	13.1	8.7	12.2	8.9	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	6.7	5.8	6.3	5.6	7.1	6.5	5.2	3.8	5.2	4.8
2	---	---	6.9	5.6	5.9	4.9	6.6	6.4	4.6	3.7	4.9	4.5
3	10.4	10.1	6.2	5.6	5.5	4.8	7.2	6.3	4.5	3.5	4.9	4.4
4	10.1	9.6	6.5	6.1	5.0	4.5	7.6	6.5	4.9	3.4	5.0	4.6
5	10.1	9.5	7.0	5.7	5.1	4.3	7.6	5.5	5.8	3.8	5.7	4.4
6	9.5	9.0	5.8	4.7	4.8	4.0	5.6	4.3	5.4	3.9	5.9	5.2
7	10.1	9.1	5.4	4.6	5.4	4.2	5.0	3.8	5.9	4.2	5.5	4.4
8	11.1	10.1	6.2	4.8	5.3	3.9	4.3	3.4	5.1	4.6	4.8	3.8
9	11.3	10.3	9.1	6.1	4.5	3.6	4.1	3.1	5.2	4.4	5.3	3.7
10	10.4	9.7	9.4	8.8	5.7	4.1	5.1	2.9	6.2	5.0	5.6	4.0
11	9.8	8.7	9.0	8.1	6.5	4.9	4.1	3.3	6.0	4.8	5.7	4.1
12	9.0	8.1	8.1	7.5	5.5	4.5	4.1	3.0	5.3	4.4	4.9	3.9
13	8.1	5.3	7.5	7.1	5.2	4.2	5.0	3.3	5.6	4.4	5.0	3.2
14	8.5	7.1	7.2	5.4	5.1	3.8	4.3	2.8	5.6	4.2	6.0	3.8
15	8.8	8.2	7.3	6.8	4.7	4.1	3.5	2.9	7.1	4.0	6.4	5.5
16	9.3	8.7	7.1	6.2	5.5	4.5	4.1	2.8	6.8	4.8	6.4	5.3
17	9.6	9.1	7.0	6.1	6.2	5.5	4.9	4.1	6.1	4.9	5.3	5.1
18	9.4	8.6	6.4	5.8	6.2	5.1	5.0	3.8	6.2	4.6	6.8	5.2
19	8.9	8.4	6.1	5.4	5.9	4.6	5.1	3.6	6.9	4.7	7.5	6.5
20	9.2	8.2	5.8	5.0	5.5	4.3	4.5	3.3	6.3	5.1	7.7	7.5
21	9.8	9.2	5.9	4.7	4.7	4.0	4.0	3.6	6.7	5.2	7.6	6.5
22	10.0	9.2	6.2	4.6	5.6	4.7	4.0	3.1	7.1	5.1	6.9	6.7
23	9.3	8.8	5.9	4.7	7.9	5.6	4.4	3.7	6.6	5.9	7.4	6.9
24	9.1	8.8	5.9	4.4	8.0	6.6	4.7	3.9	6.2	5.6	7.5	5.8
25	9.9	8.6	6.5	3.9	8.1	7.1	4.7	4.2	5.8	5.3	7.4	6.3
26	9.5	8.3	7.2	4.0	7.5	6.6	4.9	4.3	5.8	5.0	7.6	6.3
27	8.8	7.2	7.7	4.1	7.1	5.4	4.5	3.8	5.7	5.1	8.4	6.7
28	9.2	7.6	8.2	4.1	6.7	6.0	5.2	4.1	6.4	5.5	8.5	8.0
29	8.1	7.0	8.4	4.2	8.1	4.5	4.8	4.2	6.1	5.3	8.4	7.6
30	7.9	6.2	5.1	3.9	7.2	6.7	4.7	3.9	5.8	5.4	9.4	8.1
31	---	---	5.6	3.7	---	---	4.5	3.9	5.7	5.1	---	---
MONTH	11.3	5.3	9.4	3.7	8.1	3.6	7.6	2.8	7.1	3.4	9.4	3.2
YEAR	13.8	2.8										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	17.0	16.0	5.5	5.0	---	---	3.5	2.5	5.5	3.0
2	---	---	18.0	16.5	5.0	4.5	---	---	4.0	3.5	5.5	3.0
3	---	---	17.0	14.5	4.5	4.0	4.5	4.0	4.5	3.0	3.0	2.5
4	---	---	14.5	12.0	5.0	4.0	5.0	4.5	3.0	2.0	2.5	2.0
5	---	---	11.5	10.5	5.5	4.5	5.0	4.0	2.0	0.5	2.5	2.0
6	19.5	17.0	11.5	10.5	7.0	5.5	4.0	3.0	2.0	1.0	2.5	1.5
7	17.0	15.5	10.5	8.0	7.5	7.0	4.0	3.0	2.0	1.5	4.5	2.5
8	16.0	15.0	8.5	8.0	7.5	7.0	4.0	3.5	1.5	0.5	4.5	3.0
9	16.0	14.5	8.0	7.5	7.5	7.0	4.5	4.0	2.0	0.5	3.0	2.5
10	15.0	14.5	8.5	7.5	9.0	7.5	4.5	4.0	2.0	1.0	3.0	2.5
11	14.5	13.5	10.5	8.5	9.0	8.0	5.5	4.5	3.0	1.5	4.5	3.0
12	14.5	14.0	11.0	9.5	8.0	7.0	5.5	5.0	4.5	3.0	5.5	4.5
13	16.0	14.0	11.0	10.0	7.5	6.0	6.5	5.0	4.5	3.0	6.0	4.5
14	17.0	15.5	11.5	10.0	6.5	5.0	5.0	4.0	3.5	2.5	6.5	5.5
15	17.5	16.0	13.5	11.5	8.5	5.5	4.0	2.0	3.0	2.0	5.5	4.5
16	18.5	17.5	13.5	12.5	9.0	8.0	2.0	1.5	3.0	2.0	5.5	4.5
17	19.0	18.0	12.5	11.5	8.5	6.5	2.0	1.5	3.5	2.5	5.5	5.5
18	18.5	18.0	13.0	11.0	6.5	5.5	4.5	2.0	4.0	3.0	5.5	5.0
19	18.0	17.0	13.0	11.5	6.0	5.5	5.0	4.5	3.5	2.0	5.5	4.5
20	17.5	16.5	11.5	10.0	6.0	5.5	5.5	5.0	2.0	1.5	7.0	5.0
21	18.5	17.0	10.0	6.0	6.5	6.0	5.5	5.0	3.0	2.0	8.5	7.0
22	18.5	18.0	6.0	5.0	6.0	4.5	7.0	5.0	3.0	2.5	9.5	8.5
23	---	---	6.0	4.5	4.5	4.5	7.0	6.0	2.5	2.0	---	---
24	---	---	7.5	6.0	6.5	4.5	6.5	5.5	4.5	2.5	---	---
25	---	---	8.0	7.5	6.5	5.5	6.0	4.0	5.0	4.0	---	---
26	---	---	8.5	8.0	7.5	6.0	4.0	3.0	4.5	4.0	---	---
27	---	---	8.0	7.5	8.5	7.5	4.0	3.0	4.0	3.0	---	---
28	---	---	7.5	7.0	8.5	8.0	4.0	3.0	5.0	4.0	---	---
29	17.0	16.5	7.5	6.5	---	---	3.5	3.0	4.5	3.5	---	---
30	17.0	15.5	7.0	5.5	---	---	3.0	2.5	---	---	---	---
31	17.0	16.0	---	---	---	---	3.0	2.5	---	---	---	---
MONTH	---	---	18.0	4.5	9.0	4.0	7.0	1.5	5.0	0.5	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.0	16.5	18.5	17.0	22.0	19.5	25.0	23.5	23.5	21.5
2	---	---	19.0	17.0	18.5	18.0	21.5	20.5	24.5	23.5	23.0	22.0
3	8.0	7.5	19.0	18.0	---	---	20.5	19.5	24.5	23.0	22.0	20.5
4	8.5	8.0	18.0	16.0	---	---	20.0	19.0	24.0	22.5	20.5	19.0
5	8.5	7.0	17.5	15.0	23.5	23.0	19.5	17.5	23.0	21.0	20.0	18.0
6	---	---	19.0	16.5	23.0	21.0	19.5	17.5	22.5	21.0	20.5	17.5
7	---	---	19.0	17.5	22.5	19.5	20.0	19.0	23.0	21.0	21.5	19.0
8	---	---	18.0	15.5	24.0	21.0	21.0	19.5	22.0	20.5	21.5	20.5
9	---	---	15.5	12.5	24.0	22.0	22.0	20.5	20.5	19.0	21.0	19.5
10	---	---	14.5	12.0	22.5	19.5	22.5	20.5	21.0	18.0	20.0	18.5
11	12.5	10.5	16.0	13.5	23.5	18.0	24.5	22.0	21.5	19.0	20.5	19.5
12	14.0	11.5	17.5	16.0	25.0	19.5	25.5	24.0	22.0	21.0	21.0	20.0
13	16.0	13.5	17.5	17.0	24.5	20.5	25.5	24.0	24.0	21.0	23.0	20.5
14	15.5	14.0	18.5	17.0	25.0	21.5	26.0	24.0	24.5	22.5	22.5	21.0
15	14.0	11.0	18.5	17.5	23.5	21.5	25.5	25.0	25.0	23.0	21.5	20.0
16	13.5	12.5	18.0	17.0	22.5	21.0	25.0	24.0	24.0	21.5	21.5	19.5
17	14.0	12.0	18.5	17.0	22.0	21.0	25.0	23.0	23.0	21.0	22.0	21.0
18	15.0	12.5	20.0	17.5	22.5	20.0	26.5	24.0	24.5	22.5	21.0	19.5
19	15.5	14.0	21.5	19.0	24.5	22.0	26.0	23.5	24.5	22.0	21.0	20.0
20	15.5	13.0	21.0	20.0	24.5	24.0	28.0	25.5	24.5	23.0	20.0	19.0
21	13.0	12.0	22.5	19.5	24.0	20.0	28.5	27.0	24.5	23.0	20.0	18.5
22	12.5	10.5	22.5	21.0	20.0	16.5	28.5	27.5	24.5	21.5	20.0	19.0
23	14.0	12.0	22.5	21.0	16.5	13.0	29.0	27.0	22.5	21.0	19.0	17.0
24	13.5	12.5	23.5	21.5	15.0	14.5	27.5	26.5	24.5	21.5	19.0	17.0
25	13.5	12.0	23.5	21.5	16.5	14.5	27.0	25.5	25.0	23.5	20.0	19.0
26	13.5	11.5	22.5	21.0	18.0	16.0	25.5	24.5	25.5	23.5	20.0	19.5
27	14.5	12.0	21.5	20.0	19.5	17.0	24.5	23.0	24.5	22.5	20.0	18.5
28	14.5	12.5	22.0	20.0	21.0	19.0	23.5	22.0	22.5	21.0	18.5	17.5
29	15.0	14.0	23.0	21.0	20.5	18.0	24.0	22.5	23.0	21.0	19.0	18.0
30	16.5	14.5	22.5	20.0	19.5	19.0	25.0	23.0	23.0	20.5	19.0	15.5
31	---	---	20.0	18.0	---	---	25.5	23.0	23.5	21.0	---	---
MONTH	---	---	23.5	12.0	25.0	13.0	29.0	17.5	25.5	18.0	23.5	15.5
YEAR	29.0	0.5										

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	338	83	76	198	7	3.7	1290	66	230
2	289	18	14	230	11	6.8	998	59	159
3	261	28	20	237	12	7.7	792	54	115
4	237	13	8.3	198	13	6.9	682	20	37
5	205	13	7.2	182	23	11	646	12	21
6	198	28	15	169	24	11	2290	344	2860
7	521	155	233	216	9	5.2	4050	653	8320
8	310	144	121	185	8	4.0	3770	321	3860
9	700	195	491	185	9	4.5	2440	158	1040
10	1020	212	719	189	9	4.6	1970	128	681
11	489	37	49	185	8	4.0	1930	90	469
12	358	24	23	179	10	4.8	1570	72	305
13	307	27	22	172	12	5.6	1270	47	161
14	307	38	31	163	12	5.3	1580	278	1920
15	318	44	38	185	9	4.5	4060	410	4490
16	307	39	32	189	5	2.6	2560	114	788
17	300	17	14	179	7	3.4	1900	87	446
18	289	48	37	169	6	2.7	1470	54	214
19	300	45	36	244	11	7.2	1270	39	134
20	286	76	59	258	12	8.4	1330	43	154
21	279	29	22	293	31	25	1360	64	235
22	282	12	9.1	374	20	20	1120	69	209
23	289	12	9.4	370	14	14	901	73	178
24	237	11	7.0	395	10	11	757	42	86
25	244	11	7.2	426	14	16	677	37	68
26	251	9	6.1	444	14	17	727	34	67
27	261	11	7.8	605	29	53	779	33	69
28	230	12	7.5	775	62	130	907	49	120
29	205	9	5.0	1030	162	732	784	96	203
30	212	10	5.7	2080	310	1860	2810	609	6760
31	202	7	3.8	--	--	--	2880	355	3210
TOTAL	10032	--	2136.1	10704	--	2991.9	51570	--	37609

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2060	80	445	413	19	21	2610	272	2080
2	1640	154	682	398	21	23	4560	280	3450
3	1560	55	232	534	96	180	3290	142	1260
4	1480	111	444	659	81	153	2720	88	646
5	1430	64	247	455	28	34	2480	100	670
6	1160	36	113	436	32	38	2400	96	622
7	986	48	128	457	25	31	2210	111	662
8	838	32	72	435	29	34	3010	318	2580
9	921	40	114	407	38	42	2180	86	506
10	1190	147	472	389	25	26	1730	31	145
11	1050	46	130	383	33	34	1480	28	112
12	883	30	72	400	62	67	1590	81	348
13	857	28	65	791	196	547	3570	540	6200
14	834	64	144	1130	416	1270	4910	359	4760
15	647	40	70	1510	357	1460	3790	146	1490
16	570	39	60	1380	334	1240	3580	228	2200
17	550	39	58	1130	158	482	4210	254	2890
18	550	40	59	1060	74	212	3480	90	846
19	714	76	147	973	30	79	2740	98	725
20	623	85	143	757	43	88	2160	76	443
21	614	54	90	754	24	49	1850	125	624
22	598	31	50	1120	26	79	2780	274	2060
23	926	40	100	873	38	90	2300	177	1100
24	902	39	95	834	41	92	1850	67	335
25	933	65	164	775	42	88	1710	60	277
26	697	84	158	800	17	37	1540	48	200
27	605	37	60	697	32	60	1480	43	172
28	574	26	40	812	51	121	1310	33	117
29	505	45	61	1620	314	1370	1180	27	86
30	455	64	79	--	--	--	1250	73	246
31	415	29	32	--	--	--	1060	14	40
TOTAL	27767	--	4826	22382	--	8047	77010	--	37892

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972—Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	951	6	15	859	26	60	386	88	92
2	949	33	85	989	144	385	627	116	230
3	901	43	105	1000	84	227	428	25	29
4	942	41	104	894	35	84	343	10	9.3
5	859	38	88	787	32	68	289	21	16
6	792	16	34	699	28	53	283	51	39
7	964	36	94	669	27	49	275	21	16
8	867	15	35	768	51	[illegible]	247	10	6.7
9	782	26	55	3390	409	[illegible]	238	10	6.4
10	767	17	35	2240	68	411	306	7	5.8
11	744	8	16	1620	107	468	222	8	4.8
12	647	8	14	1210	56	183	192	13	6.7
13	1140	316	1170	1050	28	79	413	87	113
14	1060	122	349	1110	18	54	468	133	179
15	6090	2380	45100	997	19	51	692	401	1040
16	5160	462	6440	996	94	253	1050	772	2460
17	4610	479	5960	879	47	112	564	111	169
18	2910	447	3510	769	10	21	432	101	118
19	2340	398	2510	666	10	18	377	59	60
20	3820	529	5460	590	17	27	391	20	21
21	3320	344	3080	543	9	13	343	30	28
22	4230	469	5670	512	20	28	388	32	34
23	2960	119	951	462	30	37	4260	1050	15400
24	2290	78	482	354	23	22	2430	508	3580
25	1820	76	373	322	8	7.0	1900	298	1680
26	1530	78	322	296	6	4.8	1100	135	401
27	1290	69	240	272	6	4.4	819	188	416
28	1120	38	115	244	11	7.2	787	193	410
29	971	22	58	222	74	44	5340	1400	23300
30	844	18	41	362	388	431	3270	378	4160
31	--	--	--	598	446	720	--	--	--
TOTAL	57670	--	82493	26369	--	7790.4	28860	--	54830.7

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1340	256	926	198	12	6.4	129	15	5.2
2	914	125	308	192	17	8.8	118	14	4.5
3	1660	159	772	195	12	6.3	115	13	4.0
4	1210	113	369	182	13	6.4	103	19	5.3
5	1290	235	917	172	10	4.6	95	19	4.9
6	1280	160	553	142	14	5.4	115	29	9.0
7	854	37	85	195	15	7.9	110	14	4.2
8	755	58	118	300	34	28	105	3	.85
9	734	78	155	198	35	19	105	5	1.4
10	1230	255	847	175	24	11	90	5	1.2
11	763	36	74	209	17	9.6	76	33	6.8
12	595	13	21	151	21	8.6	205	28	15
13	516	10	14	129	13	4.5	595	108	258
14	514	104	144	118	12	3.8	1520	175	796
15	547	135	199	163	13	5.7	895	57	150
16	998	163	439	139	7	2.6	425	12	14
17	1040	99	278	498	124	184	416	62	215
18	824	105	364	342	93	86	3510	815	7130
19	1640	263	1750	501	160	269	2380	196	1260
20	825	64	143	358	27	26	1480	107	428
21	750	70	142	216	66	38	873	77	181
22	660	27	48	471	144	369	578	27	42
23	595	98	157	552	77	178	449	21	25
24	750	148	348	265	23	16	591	36	57
25	498	62	83	212	22	13	477	60	77
26	408	29	32	307	14	12	1770	650	4060
27	399	18	19	310	36	30	2100	338	2440
28	358	23	22	314	20	17	1200	36	117
29	296	15	12	209	5	2.8	865	70	163
30	251	13	8.8	163	6	2.6	4740	448	7090
31	209	12	6.8	145	8	3.1	--	--	--
TOTAL	24783	--	9354.6	7781	--	1385.1	26230	--	24585.35

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	371078
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	273121.15

04208505 CUYAHOGA RIVER AT DUPONT INTAKE IN CLEVELAND, OHIO

LOCATION.--Lat 40°28'39", long 81°40'13", in T.7 N., R.12 W., Cuyahoga County, at Dupont Products Division water intake on east side of turning basin at Station 722, and 5.1 miles upstream from mouth, in Cleveland.

DRAINAGE AREA.--794 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum 1,820 micromhos Feb. 13; minimum, 300 micromhos Sept. 30.

Period of record:
Specific conductance: Maximum, 3,020 micromhos Feb. 5, 1971; minimum, 300 micromhos July 20, 21, 1969.

REMARKS.--Continuous conductance recorder operated since October 1964 and is located in brick building at edge of turning basin. Interruptions in the record were due to malfunctions of the instrument.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1230	1190	1410	1370	920	820	570	530	---	---	880	760
2	1200	1080	1420	1260	980	920	650	540	---	---	760	630
3	1230	1130	1300	1240	1180	970	700	630	1330	1220	830	680
4	1280	1200	1330	1220	1150	1020	780	620	1480	1330	910	740
5	1280	1220	1330	1270	1100	1030	980	780	1480	1370	740	600
6	1250	1210	1330	1290	1090	800	1070	960	1410	1350	600	540
7	1230	840	1330	1160	810	570	1100	960	1520	1380	720	570
8	1110	850	1170	1110	610	560	1020	960	1550	1440	830	700
9	1250	810	1230	1110	600	590	1070	980	1570	1500	710	620
10	930	740	1240	1170	770	660	1110	960	1560	1390	770	620
11	990	920	1200	1150	---	---	960	850	1390	1160	840	750
12	1100	930	1260	1140	---	---	940	860	1230	1070	860	710
13	1210	960	1280	1200	740	670	1000	890	1820	1220	980	690
14	1310	1200	1280	1210	820	730	1140	1000	1760	1520	700	600
15	1330	1250	1310	1260	730	500	1230	1090	1580	1520	630	570
16	1330	1290	1300	1220	630	520	1300	1160	1570	1460	650	530
17	1290	1200	1250	1220	610	570	1170	1150	1540	1460	550	520
18	1260	1200	1310	1250	---	---	---	---	1540	1420	550	480
19	1320	1250	1370	1310	910	720	---	---	1520	1400	520	470
20	1310	1270	1340	1140	1010	910	---	---	1420	1220	550	490
21	1350	1300	1350	1240	940	860	---	---	1280	1220	620	530
22	1390	1310	1360	1290	860	760	---	---	1440	1210	710	570
23	1340	1250	1400	1300	830	790	---	---	1290	1000	680	570
24	1310	1260	1560	1450	870	800	---	---	1180	1020	930	670
25	1280	1250	1690	1560	940	810	---	---	1300	1160	1040	930
26	1350	1230	1580	1420	990	900	---	---	1230	1170	980	700
27	1360	1320	1420	1320	960	860	---	---	1180	1080	730	660
28	1400	1340	1320	1150	910	830	---	---	1230	1060	730	640
29	1450	1340	1160	970	930	850	---	---	1120	880	790	670
30	1400	1370	970	810	990	550	---	---	---	---	860	770
31	1410	1370	---	---	570	480	---	---	---	---	840	740
MONTH	1450	740	1690	810	1180	480	---	---	1820	880	1040	470

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	830	750	850	710	900	540	705	575	990	850	1120	920
2	800	740	810	690	980	670	755	675	1120	910	1050	980
3	850	750	780	720	1060	940	775	595	980	890	1120	1000
4	890	790	850	750	1040	960	655	575	1090	895	1030	900
5	860	790	890	740	1080	1020	795	595	1010	920	940	820
6	980	860	880	780	1040	1020	720	550	1160	1010	1050	930
7	960	840	870	780	1130	1030	715	615	1090	650	1060	940
8	840	800	870	760	1110	950	690	570	865	625	1110	990
9	910	800	830	500	1060	995	765	665	920	720	---	---
10	900	820	650	490	995	980	680	520	935	885	1100	1030
11	820	800	590	530	980	945	735	515	1070	910	1080	1020
12	870	780	660	580	1150	950	1050	650	1160	975	1060	980
13	900	800	790	650	1040	855	920	680	1120	1000	1060	900
14	835	745	810	660	855	830	835	695	1210	995	910	520
15	880	380	810	650	1120	830	950	790	1030	800	870	620
16	555	455	790	680	940	720	865	725	1110	785	850	700
17	540	470	890	710	825	745	760	580	1180	605	900	810
18	575	540	880	720	970	770	895	615	895	695	900	430
19	650	560	910	770	1040	815	710	430	1020	555	570	430
20	700	520	850	780	1120	640	740	600	835	585	560	550
21	600	500	880	790	890	670	---	---	1030	785	680	580
22	630	480	870	800	845	825	---	---	975	825	770	640
23	650	470	880	790	825	490	---	---	905	585	850	710
24	650	520	870	810	755	555	---	---	875	675	800	710
25	720	550	910	610	780	600	980	780	940	820	830	710
26	780	570	820	790	745	585	850	730	945	785	770	530
27	730	600	900	800	850	630	920	770	840	680	530	450
28	780	630	950	820	955	755	1070	820	835	595	760	520
29	1050	660	960	880	815	415	1090	860	840	620	760	620
30	820	680	1100	800	655	415	900	860	865	765	650	300
31	---	---	880	600	---	---	900	840	1110	865	---	---
MONTH	1050	380	1100	490	1150	415	1090	430	1210	555	1120	300
YEAR	1820	300										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO

LOCATION.--Lat 41°29'17", long 81°41'07", in T.7 N., R.12 W., Cuyahoga County, at bridge on West Third Street in Cleveland, 3 miles upstream from mouth, and 1.2 miles downstream from turning basis. Continuous water-quality recorder located on left bank just upstream from bridge.

DRAINAGE AREA.--798 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1966 to September 1972.
Water temperatures: November 1966 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,830 micromhos Jan. 20; minimum, 366 micromhos June 29.
pH: Maximum, 7.9 Mar. 2, 3; minimum, 6.6 May 15, Sept. 17, 24.
Dissolved oxygen: Maximum, 13.3 mg/l Jan. 22, 23; minimum, 0.0 mg/l on several days during November, May to August.
Water temperatures: Maximum, 32.0°C July 23; minimum, 3.5°C Mar. 5, 6.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT.								
08...	1210	112	0	120	120	1.2	4.6	20
19...	1300	--	--	--	--	--	--	--
29...	1315	126	0	150	230	1.5	13	57
NOV.								
12...	1300	118	0	150	200	1.7	8.0	35
26...	1315	152	0	140	330	1.0	15	66
DEC.								
06...	1200	117	0	120	150	1.8	9.1	40
13...	1100	95	0	93	77	.4	4.0	18
JAN.								
03...	1300	94	0	76	100	.6	4.4	20
27...	1130	110	0	110	160	1.3	5.7	25
FEB.								
15...	1337	92	0	95	400	1.0	5.9	26
28...	1325	110	0	110	180	1.2	7.3	32
MAR.								
08...	1010	76	0	86	140	.4	3.3	14
17...	1250	82	0	73	66	.4	2.4	10
APR.								
13...	1410	86	0	120	120	1.0	9.2	41
19...	1045	84	0	83	57	.4	2.9	13
MAY								
09...	1528	88	0	83	58	.5	3.2	14
26...	1210	110	0	130	140	1.6	9.8	43
JUNE								
01...	1340	112	0	120	160	1.1	7.5	33
05...	1915	--	--	--	--	--	--	--
23...	1300	84	0	68	33	1.0	2.0	8.6
JULY								
19...	1330	104	0	75	54	.6	3.3	15
28...	1145	124	0	120	98	1.1	8.1	36
AUG.								
02...	1520	--	--	--	--	--	--	--
08...	1010	94	0	100	93	1.0	7.9	35
14...	1440	120	0	150	140	1.5	12	53
SEP.								
05...	0955	118	0	140	140	1.5	13	58
27...	1620	100	0	72	47	.6	3.1	14

DATE	TIME	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.												
19...	1300	8	150	0	0	0	6	22	12	4	1	190

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

EXTREMES.--Continued
Period of record:
Specific conductance (1967-72): Maximum, 2,840 micromhos Feb. 5, 1971; minimum, 366 micromhos June 29, 1972.
pH (1969-72): Maximum, 9.3 Sept. 14, 1969; minimum, 4.3 May 16, 1969.
Dissolved oxygen (1967-68, 1970-72): Maximum, 12.7 mg/l Jan. 6, 7, 1971; minimum, 0.0 mg/l on many days during 1967, 1968, 1971, and 1972.
Water temperatures: Maximum, 35.0°C July 24, 1967; minimum, 1.0°C Jan. 1, 1969.

REMARKS.--Continuous water-quality recorder operated since November 1966. Maximum recorded dissolved oxygen concentrations of 15.0 mg/l or greater occurred on several days during 1968 and 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
08...	1.2	3.7	516	230	140	891	--	--
19...	--	--	--	--	--	--	<.5	9.0
29...	.92	2.8	792	290	190	1360	--	--
NOV.								
12...	.18	.55	696	280	180	1140	--	--
26...	.57	1.8	918	280	160	1570	--	--
DEC.								
06...	.17	.52	600	240	140	982	--	--
13...	.070	.21	392	180	100	622	--	--
JAN.								
03...	.14	.44	410	190	110	678	--	--
27...	.13	.40	578	230	140	962	--	--
FEB.								
15...	.14	.42	912	220	140	1570	--	--
28...	.18	.57	622	240	150	1070	--	--
MAR.								
08...	.060	.20	452	180	120	781	--	--
17...	.14	.44	314	150	83	508	--	--
APR.								
13...	.22	.66	530	230	160	833	--	--
19...	.12	.38	308	170	100	517	--	--
MAY								
09...	.32	.99	308	160	88	529	--	--
26...	.18	.54	600	260	170	985	--	--
JUNE								
01...	.23	.70	592	250	160	1020	--	--
05...	--	--	--	--	--	--	<.5	7.0
23...	.33	1.0	236	140	71	386	--	--
JULY								
19...	.62	1.9	310	160	75	485	--	--
28...	.42	1.3	516	250	150	842	--	--
AUG.								
02...	--	--	--	--	--	--	<.5	--
08...	.42	1.3	420	200	120	675	--	--
14...	.38	1.2	606	280	180	962	--	--
SEP.								
05...	.47	1.4	604	270	170	1000	--	--
27...	.39	1.2	270	160	78	460	--	--

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1220	1050	1370	1360	879	777	---	---	1310	1190	878	765
2	1220	1070	1370	1350	888	876	---	---	1210	1170	765	639
3	1100	1070	1350	1300	1160	939	714	666	1250	1150	801	666
4	1190	1150	1300	1250	1160	1070	738	657	1330	1210	909	801
5	1210	1190	1290	1250	1070	980	1010	738	1450	1270	813	597
6	1220	1200	1300	1290	1040	738	1020	972	1470	1310	597	549
7	1210	887	1300	1280	738	516	1130	995	1480	1350	684	579
8	929	869	1280	1160	531	483	1050	975	1560	1480	822	684
9	1190	926	1160	1130	585	531	1090	990	1530	1440	684	624
10	983	740	1240	1150	642	573	1120	966	1530	1420	741	618
11	941	878	1240	1190	669	615	978	873	1420	1200	831	741
12	962	917	1190	1160	624	573	945	879	1200	1060	846	729
13	1090	962	1240	1170	669	609	982	873	1620	1080	936	678
14	1230	1090	1270	1240	777	669	1110	978	1820	1660	678	585
15	1260	1230	1320	1270	669	468	1260	1110	1720	1320	591	561
16	1300	1260	1320	1280	576	492	1300	1200	1340	987	609	543
17	1290	1250	1280	1250	600	573	1290	1130	1120	1010	576	513
18	1260	1210	1260	1250	678	591	1310	1170	1210	1080	528	498
19	1270	1230	1320	1260	840	678	1820	1310	1300	1130	513	504
20	1270	1250	1320	1250	990	840	1830	1280	1210	1090	549	513
21	1310	1270	1330	1200	1010	861	1280	1150	1200	985	588	549
22	1350	1300	1360	1290	861	762	1200	1080	1310	1200	648	574
23	1340	1320	1340	1260	822	756	1180	1060	1240	967	634	547
24	1320	1300	1480	1340	861	780	1200	1020	1130	949	838	634
25	1300	1280	1650	1470	951	798	1050	945	1280	1050	1020	838
26	1280	1260	1640	1490	1010	921	1060	972	1260	1160	1010	715
27	1320	1280	1480	1310	969	900	1050	960	1160	1110	715	655
28	1330	1320	1300	1170	921	870	1070	960	1160	1070	697	670
29	1370	1330	1180	981	960	852	1280	1070	1130	878	730	679
30	1370	1350	981	777	890	582	1340	1270	---	---	790	727
31	1360	1350	---	---	---	---	1360	1260	---	---	805	736
MONTH	1370	740	1650	777	1160	468	1830	657	1820	878	1020	498

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	775	739	721	691	1080	918	653	546	921	912	981	933
2	754	724	736	676	1080	919	676	653	936	921	993	975
3	772	733	739	691	997	922	715	567	948	921	1020	987
4	808	754	820	712	961	865	602	572	966	948	1040	1020
5	820	799	760	724	877	838	642	593	990	957	1030	969
6	650	808	820	760	916	844	630	561	1030	984	972	918
7	950	847	820	787	955	913	678	630	1040	819	972	936
8	865	829	796	760	965	949	732	678	819	690	1010	972
9	919	808	763	507	988	958	771	717	924	696	1010	999
10	916	880	567	510	997	982	774	609	924	861	1010	987
11	880	829	588	552	994	967	666	603	960	924	996	984
12	841	808	642	588	982	959	708	648	996	957	1070	981
13	934	833	687	642	964	883	771	708	1010	990	1070	900
14	880	778	708	663	892	790	810	771	1020	990	903	504
15	844	376	696	657	880	793	852	810	996	957	603	573
16	463	424	711	666	808	661	849	762	957	858	714	603
17	448	415	735	702	772	661	762	597	924	768	804	714
18	499	454	741	723	790	772	682	604	789	669	816	396
19	538	496	783	738	829	790	629	428	888	669	540	390
20	556	430	822	783	871	820	669	552	684	606	531	519
21	481	427	837	795	884	871	723	666	828	681	594	528
22	517	406	843	810	898	865	736	718	876	828	696	594
23	490	418	855	822	865	372	720	699	888	672	753	693
24	517	475	898	841	575	468	705	603	744	675	777	753
25	559	517	1010	886	620	471	704	608	834	744	765	717
26	604	553	1040	1010	691	620	703	666	885	816	759	537
27	625	586	1050	1020	760	691	---	---	891	747	612	460
28	622	589	1020	994	799	682	872	820	777	732	639	612
29	661	622	997	946	742	366	968	872	762	720	687	633
30	706	661	979	919	546	378	909	852	861	741	658	394
31	---	---	937	891	---	---	852	843	936	858	---	---
MONTH	950	376	1050	507	1080	366	968	428	1040	606	1070	390
YEAR	1830	366										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.2	7.1	7.0	7.0	7.4	7.3	---	---	7.3	7.2	7.5	7.2
2	7.1	7.0	7.1	7.0	7.3	7.2	---	---	7.5	6.9	7.9	7.4
3	7.1	7.0	7.0	7.0	7.5	7.3	7.6	7.4	7.5	7.3	7.9	7.3
4	7.0	7.0	7.2	7.0	7.5	7.3	7.4	7.2	7.5	7.3	7.6	7.3
5	7.1	7.0	7.2	7.2	7.6	7.3	7.4	7.2	7.5	7.3	7.6	7.4
6	7.1	7.0	7.2	7.1	7.5	7.3	7.3	7.1	7.4	7.4	7.5	7.3
7	7.2	7.1	7.1	7.1	7.6	7.3	7.3	7.1	7.4	7.2	7.5	7.3
8	7.2	7.0	7.1	7.1	7.5	7.4	7.4	7.2	7.4	7.2	7.4	7.2
9	7.4	7.1	7.2	7.1	7.5	7.4	7.4	7.2	7.5	7.3	7.3	7.2
10	7.4	7.3	7.4	7.2	7.6	7.4	7.4	7.3	7.5	7.4	7.3	7.1
11	7.4	7.3	7.4	7.3	7.5	7.2	7.3	7.3	7.4	7.4	7.2	7.0
12	7.3	7.2	7.3	7.1	7.5	7.4	7.3	7.2	7.5	7.4	7.5	7.0
13	7.3	7.2	7.1	7.0	7.5	7.4	7.2	7.2	7.5	7.3	7.6	7.4
14	7.2	7.1	7.1	7.0	7.5	7.3	7.2	7.0	7.6	7.5	7.5	7.4
15	7.2	7.1	7.1	7.1	7.5	7.4	7.3	7.1	7.5	7.3	7.5	7.4
16	7.1	7.1	7.1	7.1	7.4	7.4	7.3	7.1	7.5	7.3	7.5	7.3
17	7.2	7.1	7.1	7.1	7.4	7.3	7.3	7.2	7.5	7.3	7.5	7.3
18	7.3	7.2	7.1	7.0	7.4	7.3	7.2	7.1	7.5	7.4	7.4	7.2
19	7.3	7.1	7.1	7.1	7.5	7.3	7.2	7.1	7.4	7.3	7.4	7.3
20	7.1	7.0	7.2	7.1	7.4	7.2	7.2	7.1	7.4	7.3	7.4	7.3
21	7.1	7.0	7.2	7.1	7.4	7.2	7.2	7.1	7.3	7.2	7.4	7.2
22	7.1	7.0	7.3	7.2	7.4	7.3	7.2	7.1	7.6	7.3	7.4	7.2
23	7.1	7.0	7.3	7.2	7.4	7.3	7.1	7.1	7.5	7.4	7.3	7.1
24	7.1	6.8	7.4	7.3	7.4	7.2	7.2	7.1	7.4	7.1	7.4	7.1
25	7.0	6.8	7.4	7.3	7.4	7.3	7.1	7.1	7.4	7.2	7.4	7.1
26	7.0	6.9	7.4	7.4	7.4	7.4	7.1	7.0	7.5	7.2	7.4	7.2
27	7.0	6.9	7.4	7.3	7.7	7.4	7.3	7.0	7.5	7.2	7.4	7.3
28	7.0	6.9	7.4	6.9	7.6	7.2	7.3	7.2	7.5	7.4	7.5	7.4
29	7.0	6.9	7.5	7.4	7.4	7.3	7.4	6.9	7.5	7.3	7.4	7.3
30	7.0	6.9	7.5	7.3	7.4	7.2	7.3	7.1	---	---	7.5	7.3
31	7.0	6.9	---	---	---	---	7.3	7.2	---	---	7.4	7.2
MONTH	7.4	6.8	7.5	6.9	7.7	7.2	7.6	6.9	7.6	6.9	7.9	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.3	7.1	7.0	7.2	7.0	7.4	7.2	7.0	7.0	7.0	6.9
2	7.4	7.3	7.0	6.8	7.3	6.9	7.3	7.0	7.1	7.0	7.0	6.9
3	7.5	7.3	7.1	6.9	7.0	6.9	7.3	7.0	7.1	7.0	7.0	6.9
4	7.4	7.3	7.0	7.0	7.0	6.8	7.3	7.1	7.1	7.1	7.0	7.0
5	7.5	7.4	7.1	7.0	7.1	6.9	7.3	7.1	7.2	7.0	7.1	6.9
6	7.4	7.2	7.0	6.9	7.1	7.0	7.3	7.2	7.3	7.1	7.0	6.8
7	7.5	7.3	7.0	6.9	7.1	7.0	7.2	7.1	7.5	7.0	7.1	6.9
8	7.6	7.3	7.1	7.0	7.1	7.0	7.2	7.1	7.3	7.0	7.0	7.0
9	7.4	7.3	7.1	6.9	7.2	7.1	7.2	7.0	7.2	7.1	7.1	7.0
10	7.4	7.2	7.3	7.1	7.2	7.0	7.4	7.0	7.1	7.0	7.1	7.0
11	7.3	7.1	7.2	7.0	7.1	7.0	7.3	6.9	7.1	6.9	7.1	6.9
12	7.2	7.0	7.1	7.1	7.1	7.1	7.3	6.9	7.0	7.0	7.0	7.0
13	7.2	7.0	7.1	6.9	7.1	7.0	7.0	6.9	7.1	6.9	7.0	6.7
14	7.3	7.0	7.0	6.9	7.1	6.9	7.4	6.9	7.1	6.9	7.0	6.8
15	7.5	7.0	7.2	6.6	7.1	7.0	7.1	6.8	7.1	7.0	7.0	6.8
16	7.3	7.2	7.1	7.0	7.4	7.1	6.9	6.9	7.0	6.9	7.0	6.7
17	7.3	7.2	7.1	7.0	7.3	7.0	7.6	6.9	7.0	6.9	6.9	6.6
18	7.2	7.1	7.1	6.8	7.0	6.9	7.4	6.8	7.0	6.8	7.0	6.8
19	7.2	7.0	7.0	6.8	7.4	7.0	7.0	6.9	7.0	6.9	7.0	6.9
20	7.3	7.2	7.0	6.9	7.5	7.1	7.3	6.9	7.1	6.8	7.2	7.1
21	7.3	7.1	7.0	6.9	7.1	7.1	7.1	6.9	7.0	6.8	7.1	6.9
22	7.3	7.0	7.0	6.9	7.1	7.1	7.1	6.9	7.0	6.9	7.1	6.9
23	7.2	7.2	7.0	6.9	7.7	7.1	7.2	7.0	7.0	6.8	7.0	6.9
24	7.2	7.1	7.0	6.9	7.5	7.3	7.2	7.1	7.0	6.8	6.9	6.6
25	7.3	7.0	7.0	6.9	7.5	7.4	7.2	7.1	7.0	6.9	6.8	6.7
26	7.2	7.1	7.0	7.0	7.4	7.2	7.6	7.2	7.0	6.8	6.8	6.7
27	7.1	7.1	7.1	7.0	7.2	7.1	---	---	7.0	6.9	7.1	6.8
28	7.2	7.0	7.1	6.9	7.2	7.0	7.2	7.0	7.0	6.9	7.2	6.8
29	7.2	7.0	7.0	6.9	7.5	7.1	7.0	7.0	7.0	6.9	7.2	7.0
30	7.0	6.9	7.0	6.9	7.5	7.2	7.0	7.0	7.0	6.9	7.5	7.2
31	---	---	7.1	7.0	---	---	7.1	7.0	7.0	6.9	---	---
MONTH	7.6	6.9	7.3	6.6	7.7	6.8	7.6	6.8	7.5	6.8	7.5	6.6
YEAR	7.9	6.6										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.6	0.3	0.4	0.4	10.3	9.1	---	---	10.3	9.4	11.5	9.9
2	0.9	0.3	0.4	0.3	10.5	10.0	---	---	9.4	7.8	11.7	10.2
3	0.8	0.3	0.3	0.1	10.6	10.0	10.8	10.5	7.8	7.1	12.3	11.7
4	0.5	0.3	0.4	0.0	10.3	9.0	11.1	10.7	8.4	6.9	12.3	12.0
5	0.3	0.2	0.5	0.3	9.6	9.0	11.0	10.7	9.0	8.2	12.4	11.6
6	0.2	0.1	0.4	0.3	9.4	8.1	11.2	10.9	8.7	8.1	12.7	12.1
7	1.1	0.3	0.9	0.3	9.3	8.5	11.5	11.2	8.9	7.5	12.4	11.8
8	3.1	1.1	1.0	0.7	9.3	8.6	11.6	11.1	9.2	8.9	12.1	11.4
9	2.9	2.2	3.6	0.8	9.3	8.8	11.7	11.0	9.3	8.8	12.4	11.9
10	6.5	2.7	4.5	2.2	9.0	7.2	11.5	11.3	9.2	9.0	12.2	12.0
11	6.3	5.0	5.1	4.1	7.8	5.9	11.5	10.4	9.1	8.9	12.0	11.5
12	5.0	3.7	5.1	3.9	9.3	6.4	10.7	9.2	8.9	8.3	11.5	11.2
13	3.7	2.1	4.1	3.0	9.9	7.9	9.4	8.0	8.3	7.5	11.3	10.1
14	2.1	0.9	3.1	1.7	9.9	9.1	8.3	7.4	8.2	7.9	11.1	10.6
15	1.4	0.3	3.2	1.9	10.0	9.5	8.1	7.7	9.7	7.3	11.6	10.9
16	1.1	0.3	3.2	1.8	9.5	8.0	8.0	7.6	10.1	9.6	11.5	11.0
17	0.6	0.1	2.1	1.5	8.3	7.6	8.0	7.6	10.0	9.6	11.6	10.7
18	1.1	0.2	2.3	1.4	7.6	7.2	8.6	7.8	9.7	9.3	11.2	10.7
19	0.8	0.2	2.9	1.8	7.2	6.7	8.6	7.2	9.3	8.9	11.4	11.0
20	0.2	0.1	2.0	0.4	6.7	5.5	7.9	7.0	9.5	8.6	11.1	10.7
21	0.1	0.1	4.7	0.4	9.2	5.2	7.9	7.0	9.6	9.5	10.7	9.8
22	0.4	0.1	4.9	4.4	9.2	9.0	13.3	7.9	11.7	9.6	9.8	8.5
23	0.2	0.2	7.4	4.9	9.2	8.8	13.3	11.9	11.8	5.5	10.2	9.7
24	0.2	0.2	8.6	7.4	9.0	8.2	13.2	11.8	11.5	10.9	10.4	10.1
25	0.2	0.2	8.4	7.9	8.4	7.1	12.4	11.1	10.9	10.2	10.2	9.4
26	0.2	0.2	7.9	6.2	7.1	6.8	11.6	10.8	10.2	9.6	10.1	9.9
27	0.2	0.2	6.2	5.1	9.0	6.3	11.3	10.6	9.6	9.0	9.9	9.5
28	0.2	0.2	6.5	4.9	9.3	7.5	10.7	10.1	10.1	8.9	9.5	9.0
29	0.6	0.2	8.6	6.5	8.6	7.9	10.1	9.5	10.7	9.5	9.2	8.7
30	0.9	0.4	9.0	4.9	9.3	8.6	9.8	5.2	---	---	8.9	7.9
31	0.7	0.4	---	---	---	---	10.3	5.5	---	---	8.6	8.2
MONTH	6.5	0.1	9.0	0.0	10.6	5.2	13.3	5.2	11.8	5.5	12.7	7.9

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.8	8.2	4.7	3.2	0.3	0.0	6.3	5.5	0.4	0.3	0.3	0.2
2	8.5	8.1	4.0	1.6	1.1	0.0	6.0	4.3	0.4	0.4	0.3	0.2
3	8.6	7.7	4.2	1.8	1.8	0.7	6.2	3.8	0.4	0.2	0.4	0.3
4	9.0	7.1	4.1	3.0	0.9	0.2	6.0	4.8	0.5	0.1	0.5	0.4
5	8.3	7.5	4.2	3.5	1.0	0.0	5.6	4.7	1.3	0.1	0.6	0.5
6	8.1	6.2	5.3	4.1	0.6	0.3	5.7	4.7	0.5	0.0	0.6	0.4
7	8.2	7.3	5.5	4.6	0.7	0.4	4.7	3.3	1.2	0.2	0.6	0.5
8	8.5	6.9	5.7	4.6	0.7	0.3	3.9	3.1	1.3	0.4	0.5	0.4
9	8.4	6.8	7.8	5.7	0.5	0.3	3.5	1.6	0.5	0.4	0.8	0.4
10	9.1	6.5	7.8	7.1	0.6	0.4	4.6	1.3	0.6	0.4	0.5	0.4
11	7.4	5.6	7.1	6.5	0.5	0.4	4.4	2.6	0.5	0.2	0.5	0.4
12	6.3	5.2	6.6	4.4	0.7	0.5	3.7	1.9	0.4	0.1	0.6	0.4
13	6.2	3.5	4.5	3.2	0.6	0.5	2.2	0.4	0.4	0.1	0.5	0.4
14	5.4	4.1	3.9	2.9	1.0	0.6	0.8	0.0	0.4	0.1	2.7	0.5
15	7.1	5.3	4.5	2.6	0.8	0.7	1.1	0.4	0.2	0.1	2.5	1.9
16	7.8	7.0	3.0	1.3	1.5	0.7	1.0	0.1	0.5	0.1	2.5	0.9
17	8.3	7.1	2.6	1.8	2.1	1.5	2.8	1.0	0.6	0.1	1.2	0.5
18	8.3	7.0	2.0	0.4	2.1	1.6	2.8	1.2	1.2	0.6	4.7	0.5
19	7.9	6.7	2.7	0.1	2.1	1.3	3.9	0.8	1.2	0.6	4.9	3.7
20	8.0	7.2	2.3	0.4	1.5	1.3	3.5	1.3	1.9	0.9	6.0	5.2
21	8.2	7.2	1.6	0.9	1.3	1.2	2.5	1.3	0.9	0.6	5.9	3.6
22	8.0	6.8	1.7	0.8	1.3	1.1	1.6	0.8	0.6	0.5	5.0	2.5
23	8.3	7.8	0.8	0.0	7.7	1.3	1.8	0.5	0.9	0.2	2.8	1.8
24	9.5	6.8	0.2	0.1	7.6	5.8	1.1	0.5	0.9	0.5	2.8	1.7
25	8.5	7.3	0.5	0.1	7.7	7.0	1.7	1.2	0.7	0.2	2.7	1.7
26	9.0	6.6	0.2	0.0	7.0	6.1	1.3	0.6	0.5	0.1	3.5	0.9
27	7.6	6.6	0.4	0.0	6.1	3.5	---	---	0.4	0.1	4.1	3.2
28	7.2	4.2	0.2	0.0	4.7	3.3	0.8	0.6	0.5	0.1	3.8	2.5
29	4.8	3.2	0.2	0.0	7.2	3.9	0.6	0.4	0.6	0.2	3.5	1.5
30	5.1	4.2	0.3	0.0	7.2	5.6	0.4	0.3	0.4	0.1	6.4	2.3
31	---	---	0.3	0.0	---	---	0.4	0.3	0.2	0.1	---	---
MONTH	9.5	3.2	7.8	0.0	7.7	0.0	6.3	0.0	1.9	0.0	6.4	0.2
YEAR	13.3	0.0										

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.0	25.5	23.5	23.0	8.0	7.5	---	---	8.5	7.0	8.0	7.0
2	27.0	26.0	23.5	22.5	8.0	7.5	---	---	10.0	8.5	8.0	5.0
3	27.0	26.0	22.5	22.0	8.5	7.5	6.0	5.5	11.0	9.5	5.0	4.0
4	27.0	26.5	22.5	21.0	9.0	8.0	6.5	6.0	10.0	7.0	4.5	4.0
5	27.0	26.5	22.0	20.5	9.0	8.5	6.5	6.0	7.5	6.5	4.5	3.5
6	26.5	25.5	20.5	19.5	9.5	7.5	6.0	5.0	7.5	7.0	4.5	3.5
7	25.5	19.0	19.5	17.5	8.5	8.0	6.0	5.0	7.5	7.0	7.0	4.5
8	19.0	18.5	17.5	16.5	8.0	7.5	7.0	6.0	7.5	7.5	7.0	5.0
9	20.5	18.5	16.5	15.5	9.0	8.0	7.5	6.5	7.5	7.5	5.0	4.0
10	18.5	15.5	15.5	15.5	10.5	9.0	7.0	6.5	8.0	7.5	5.5	4.5
11	17.5	15.5	16.5	15.5	11.5	10.5	8.0	7.0	8.5	7.5	6.5	5.5
12	18.5	17.0	17.0	16.5	10.5	8.5	8.5	7.5	10.0	8.5	8.5	6.5
13	19.5	18.5	18.0	17.0	9.0	8.5	9.0	8.5	10.0	7.0	8.5	7.0
14	20.5	19.5	19.0	18.0	9.0	6.5	9.0	7.5	7.0	5.5	7.5	6.5
15	21.5	20.5	19.5	19.0	9.5	6.0	7.5	6.5	6.0	5.0	6.5	6.0
16	22.5	21.5	19.5	19.0	10.0	9.5	6.5	5.0	5.0	4.0	6.5	5.5
17	23.0	22.0	20.0	19.5	9.5	8.5	5.0	4.0	6.0	5.0	6.5	6.0
18	23.5	22.5	20.0	20.0	8.5	6.5	7.5	5.0	7.0	6.0	6.5	5.5
19	23.0	22.0	20.0	19.5	7.0	6.5	8.5	7.5	7.5	7.0	6.0	5.0
20	23.0	22.5	19.5	18.0	8.0	7.0	9.0	8.0	6.5	6.0	7.5	6.0
21	23.0	22.0	18.0	15.0	8.0	7.5	10.0	8.5	6.0	5.5	9.5	7.5
22	23.0	22.5	15.0	12.5	8.5	6.0	11.0	9.5	7.0	5.5	11.5	8.0
23	23.5	23.0	12.5	11.0	8.0	7.5	10.5	10.0	6.5	5.5	8.0	6.0
24	23.5	23.0	11.5	11.0	8.5	7.5	10.0	9.0	7.5	6.5	6.0	5.5
25	23.5	23.0	12.5	11.5	10.0	8.5	9.5	8.0	9.5	7.5	6.5	6.0
26	23.0	22.5	12.5	12.5	10.0	9.5	8.0	7.0	10.0	9.0	8.0	6.5
27	23.5	22.5	12.5	12.5	11.0	10.0	7.5	7.0	10.0	9.5	9.0	8.0
28	23.5	23.0	12.5	10.5	11.5	10.5	8.0	7.0	10.0	9.0	10.5	9.0
29	24.0	23.0	10.5	9.5	10.5	10.0	8.0	7.5	10.0	7.5	11.0	10.5
30	24.0	23.5	9.5	7.5	10.0	7.0	8.0	7.5	---	---	10.5	9.5
31	24.0	23.5	---	---	---	---	8.0	7.0	---	---	12.0	10.5
MONTH	27.0	15.5	23.5	7.5	11.5	6.0	11.0	4.0	11.0	4.0	12.0	3.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	11.5	21.5	20.0	21.5	21.5	24.0	21.0	30.0	29.5	30.5	29.5
2	12.0	10.5	22.0	21.0	21.5	20.5	25.0	23.5	30.0	29.5	30.5	30.0
3	12.5	11.0	22.0	21.5	23.5	20.5	25.0	21.5	30.0	29.5	30.5	30.0
4	12.0	11.5	22.0	20.5	24.5	23.0	22.0	21.5	29.5	29.0	30.0	29.0
5	12.5	12.0	20.5	20.0	26.5	24.5	22.5	19.5	29.5	28.5	29.0	28.5
6	14.0	12.5	22.0	20.0	27.0	26.0	20.0	18.0	29.0	29.0	29.0	28.0
7	14.0	11.5	23.0	22.0	27.5	26.5	22.0	20.0	29.0	23.0	29.0	28.5
8	11.5	10.0	22.5	20.5	27.5	26.5	23.5	22.0	25.5	23.0	29.0	29.0
9	11.0	9.5	20.5	13.0	28.0	27.5	24.0	23.0	25.0	24.5	29.0	28.5
10	13.0	10.5	15.5	13.5	27.5	26.0	24.0	23.0	26.0	25.0	29.0	28.5
11	15.5	13.0	17.0	15.5	26.0	25.5	26.0	23.0	26.5	25.5	29.0	28.5
12	17.5	15.0	20.0	17.0	26.0	25.5	28.5	26.0	27.5	26.5	29.0	27.5
13	19.0	17.5	22.0	20.0	26.5	25.0	29.0	27.5	28.5	27.0	27.5	26.0
14	19.5	18.5	21.5	21.0	27.0	24.5	29.0	28.5	29.0	28.0	26.0	22.5
15	19.0	12.5	22.0	21.0	27.5	26.5	29.5	28.5	29.5	28.5	23.5	23.0
16	14.5	13.5	22.0	21.5	27.0	24.5	29.0	27.5	29.0	28.5	25.5	23.5
17	15.0	13.0	21.5	21.0	26.0	24.5	27.5	26.0	29.5	25.5	27.0	25.0
18	16.5	14.5	22.5	21.5	26.5	26.0	28.0	26.0	27.0	25.0	27.0	21.0
19	17.5	16.5	25.0	22.5	27.5	26.0	26.0	24.0	28.5	25.0	22.5	21.0
20	17.5	14.0	26.0	25.0	29.0	27.5	29.0	26.0	27.0	25.0	23.0	22.0
21	14.0	13.0	26.0	25.0	29.0	28.5	30.5	28.5	28.0	26.5	23.5	22.0
22	14.0	11.5	26.5	25.5	28.5	24.5	31.5	30.0	29.5	28.0	24.5	23.0
23	14.5	12.5	27.0	26.0	24.5	11.5	32.0	31.0	29.0	25.5	24.5	24.0
24	17.0	14.5	26.5	25.5	16.0	13.5	31.0	29.0	27.5	26.0	24.5	23.0
25	15.0	14.0	28.0	26.5	17.0	15.0	30.0	29.0	29.0	27.5	24.5	23.0
26	15.0	14.5	27.0	26.5	20.0	17.0	30.0	29.0	30.5	28.5	25.0	21.5
27	17.0	15.0	28.0	27.0	22.5	20.0	---	---	30.0	28.0	21.5	21.0
28	17.5	16.0	27.0	26.5	24.0	22.0	28.5	27.5	28.0	27.5	21.5	20.5
29	18.0	16.5	26.5	26.0	23.5	19.0	29.0	27.5	28.0	27.0	22.5	20.5
30	20.0	18.0	27.0	25.5	21.0	19.5	30.0	28.0	29.5	28.0	22.0	15.5
31	---	---	25.5	21.5	---	---	30.0	29.0	30.0	29.0	---	---
MONTH	20.0	9.5	28.0	13.0	29.0	11.5	32.0	18.0	30.5	23.0	30.5	15.5
YEAR	32.0	3.5										

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO

LOCATION.--Lat 41°37'51", long 81°24'13", in T.9 N., R.10 W., Lake County, at gaging station on left bank 150 ft downstream from city waterworks dam, 800 ft downstream from East Branch, 1 mile southeast of Willoughby, and 5.0 miles upstream from mouth. Sediment samples taken 450 ft upstream from waterworks dam.

DRAINAGE AREA.--246 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1964-72 (partial-record station).
Sediment records: July 1969 to September 1972 (partial-record station).

REMARKS.--Flow affected by ice Jan. 7, 8, 16-21, Jan. 27 to Feb. 2, Feb. 6-12.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
09...	1520	109	--	--	--	--	--	--	--
30...	0800	1810	--	--	--	--	--	--	--
JAN., 1972									
10...	1625	514	--	--	63	92	--	1.0	4.6
MAR.									
07...	1535	395	--	--	65	100	--	1.2	5.4
14...	0900	3680	--	--	--	--	--	--	--
APR.									
15...	0730	2420	--	--	--	--	--	--	--
MAY									
08...	1430	206	--	--	--	--	--	--	--
JUNE									
24...	1800	8760	--	--	--	--	--	--	--
JULY									
10...	1455	266	--	--	57	31	--	.50	2.3
AUG.									
01...	0930	57	--	--	--	--	--	--	--
SEP.									
05...	1410	48	192	0	66	27	.2	.60	2.6
12...	1025	92	--	--	--	--	--	--	--
18...	1515	1070	--	--	--	--	--	--	--
18...	1530	1150	--	--	--	--	--	--	--
20...	1200	164	--	--	--	--	--	--	--

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
09...	--	--	--	--	--	883	--	3.0
30...	--	--	--	--	--	--	--	--
JAN., 1972								
10...	--	--	--	180	--	601	8.0	2.5
MAR.								
07...	--	--	--	170	--	623	7.9	4.0
14...	--	--	--	--	--	--	--	--
APR.								
15...	--	--	--	--	--	--	--	--
MAY								
08...	--	--	--	--	--	458	--	13.0
JUNE								
24...	--	--	--	--	--	--	--	12.5
JULY								
10...	--	--	--	180	--	435	8.0	23.5
AUG.								
01...	--	--	--	--	--	502	--	22.5
SEP.								
05...	.13	.41	330	220	62	525	8.1	19.0
12...	--	--	--	--	--	531	--	19.5
18...	--	--	--	--	--	--	--	20.0
18...	--	--	--	--	--	334	--	20.0
20...	--	--	--	--	--	--	--	18.0

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	52	6	.84	--	--	--
2	--	--	--	52	4	.56	--	--	--
3	--	--	--	57	5	.77	--	--	--
4	57	32	4.9	90	5	1.2	--	--	--
5	55	15	2.2	99	5	1.3	--	--	--
6	58	16	2.5	99	5	1.3	--	--	--
7	274	65	55	133	4	1.4	--	--	--
8	--	--	--	113	4	1.2	--	--	--
9	--	--	--	124	4	1.3	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	67	30	5.4	--	--	--	--	--	--
21	63	28	4.8	--	--	--	--	--	--
22	64	26	4.5	--	--	--	--	--	--
23	72	24	4.7	--	--	--	--	--	--
24	76	22	4.5	--	--	--	--	--	--
25	78	20	4.2	--	--	--	--	--	--
26	61	18	3.9	--	--	--	--	--	--
27	75	16	3.2	--	--	--	--	--	--
28	67	14	2.5	--	--	--	437	63	74
29	60	12	1.9	602	213	669	355	56	54
30	54	10	1.5	1530	533	2350	2470	1290	11300
31	51	8	1.1	--	--	--	1260	317	1240
TOTAL	--	--	--	--	--	--	--	--	--

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	574	107	166	--	--	--	2740	1190	9600
2	470	73	93	90	2	.49	4830	1500	19600
3	420	48	54	--	--	--	--	--	--
4	345	30	28	--	--	--	--	--	--
5	320	22	19	--	--	--	--	--	--
6	238	20	13	--	--	--	--	--	--
7	210	20	11	--	--	--	--	--	--
8	180	20	9.7	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	1540	505	2910
14	--	--	--	--	--	--	2950	732	6250
15	--	--	--	--	--	--	1470	236	988
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	1170	302	1200
23	--	--	--	--	--	--	954	142	366
24	--	--	--	--	--	--	547	53	78
25	--	--	--	--	--	--	487	34	45
26	--	--	--	--	--	--	476	25	32
27	--	--	--	--	--	--	405	19	21
28	--	--	--	--	--	--	288	14	11
29	--	--	--	624	222	471	250	10	6.8
30	--	--	--	--	--	--	311	15	13
31	--	--	--	--	--	--	250	11	7.4
TOTAL	--	--	--	--	--	--	--	--	--

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	220	11	6.5	195	29	23	195	37	19
2	238	13	8.4	690	228	505	145	27	11
3	275	15	11	415	32	36	121	25	8.2
4	345	23	21	275	13	9.7	98	25	6.6
5	311	7	5.9	213	12	6.9	85	24	5.5
6	246	5	3.3	185	10	5.0	80	23	5.0
7	246	4	2.7	178	9	4.3	83	22	4.9
8	227	3	1.8	266	92	134	75	22	4.5
9	209	3	1.7	2720	1280	10400	--	--	--
10	202	2	1.1	936	158	419	--	--	--
11	185	2	1.0	437	90	106	--	--	--
12	167	2	.90	293	66	52	--	--	--
13	275	89	72	238	52	33	227	92	68
14	227	23	14	311	43	36	234	118	82
15	2560	2680	25100	284	40	31	181	47	23
16	2180	1140	8100	275	35	26	390	289	326
17	1590	331	1710	234	27	17	--	--	--
18	--	--	--	227	19	12	--	--	--
19	--	--	--	199	12	6.4	--	--	--
20	--	--	--	164	10	4.4	--	--	--
21	--	--	--	151	10	4.1	--	--	--
22	--	--	--	139	10	3.8	--	--	--
23	--	--	--	127	10	3.4	4890	1100	19300
24	--	--	--	115	10	3.1	4150	1650	27100
25	--	--	--	106	9	2.6	2780	800	6790
26	--	--	--	90	9	2.2	--	--	--
27	--	--	--	83	9	2.0	--	--	--
28	--	--	--	78	9	1.9	--	--	--
29	--	--	--	75	9	1.8	--	--	--
30	--	--	--	--	--	--	--	--	--
31	--	--	--	213	90	52	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	55	17	2.5	--	--	--
2	--	--	--	57	12	1.8	--	--	--
3	--	--	--	62	10	1.7	--	--	--
4	--	--	--	55	10	1.5	--	--	--
5	--	--	--	66	10	1.8	--	--	--
6	--	--	--	46	10	1.2	--	--	--
7	--	--	--	1100	1450	8420	--	--	--
8	--	--	--	355	176	179	--	--	--
9	--	--	--	--	--	--	--	--	--
10	262	20	14	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	90	60	15
13	--	--	--	--	--	--	181	49	24
14	--	--	--	--	--	--	726	716	2030
15	--	--	--	--	--	--	234	98	62
16	--	--	--	--	--	--	121	47	15
17	--	--	--	--	--	--	98	35	9.3
18	--	--	--	--	--	--	786	597	1650
19	--	--	--	--	--	--	432	253	331
20	--	--	--	--	--	--	167	73	33
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	1050	408	1140
28	--	--	--	--	--	--	400	132	156
29	--	--	--	--	--	--	220	49	29
30	--	--	--	--	--	--	2220	1310	9530
31	--	--	--	--	--	--	--	--	--
TOTAL	--	--	--	--	--	--	--	--	--

04209000 CHAGRIN RIVER AT WILLOUGHBY, OHIO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
NOV. 30, 1971	0800	--	1810	678	3310	28	36	49	68	82	88	93	98	100	--	--
MAR. 14, 1972	0900	--	3680	1380	13700	21	31	42	56	66	83	91	96	100	--	--
APR. 15......	0730	--	2420	5910	38600	25	33	46	62	79	92	99	100	--	--	--
JUNE 24......	1800	12.5	8760	3260	77100	25	33	35	54	80	90	95	98	100	--	--
SEPT.18......	1515	20.0	1070	1040	3010	27	37	50	65	80	87	97	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, MARCH TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
20...	1200	1	16	36	64	70	71	73	77	77	82	100
20...	1202	2	22	42	75	92	96	98	100	--	--	--

04212200 GRAND RIVER AT PAINESVILLE, OHIO

LOCATION.--Lat 41°44'09", long 81°15'59", in T.11 N., R.8 W., Lake County, at bridge on State Highway 535 in Painesville, 2.2 miles upstream from mouth, and 8 miles downstream from Kellogg Creek.

DRAINAGE AREA.--701 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1950 to February 1952, October 1962 to September 1972.
Water temperatures: March 1950 to February 1952, October 1962 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 22,600 micromhos Oct. 27; minimum, 330 micromhos Apr. 17.
pH: Maximum, 12.0 Nov. 9, 23; minimum, 4.5 Sept. 28.
Dissolved oxygen: Maximum, 15.0 mg/l Dec. 2, 3, 23, Mar. 11; minimum, 0.6 mg/l Sept. 1.
Water temperatures: Maximum, 31.5°C on several days during July to September; minimum, freezing point Jan. 14, 15, Feb. 5, 16, Mar. 8-10.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT.							
07...	1300	17	142	0	51	1800	.2
12...	1820	213	0	31	50	7900	.4
NOV.							
16...	1730	68	8	8	51	7200	.3
30...	1610	2290	84	0	61	130	.1
DEC.							
08...	1745	5400	66	0	46	140	.1
24...	1530	537	58	0	67	1100	.1
JAN.							
01...	1145	2550	43	0	48	330	.1
29...	1750	400	48	0	80	3200	.2
FEB.							
01...	1130	220	54	0	100	1380	.2
23...	1815	750	64	0	58	430	.1
MAR.							
03...	1500	8760	42	0	36	64	.1
07...	1830	1820	56	0	52	720	.2
APR.							
18...	1815	3240	44	0	42	96	.1
21...	1800	2060	64	0	68	1600	.2
MAY							
10...	0930	2180	72	0	49	130	.1
30...	2200	78	60	0	66	1600	.2
JUNE							
13...	1345	102	108	0	80	1400	.2
23...	1400	3230	42	0	36	200	.1
JULY							
14...	1945	217	63	0	49	630	.2
27...	1155	72	110	0	57	2400	.2
AUG.							
08...	1150	345	51	0	48	900	.2
29...	2200	16	68	0	56	4700	.3
SEP.							
06...	1610	12	82	0	60	4700	.3
15...	1335	542	93	0	59	440	.2

DATE	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.								
07...	0	80	4	0	16	140	1.0	7.0
JUNE								
06...	--	--	--	--	--	--	.8	5.0

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

EXTREMES.--Period of record:

Specific conductance (1950-52, 1962-68, 1970-72): Maximum, 30,300 micromhos July 14, 1964; minimum, 300 micromhos Feb. 23-28, Mar. 1, 1971.

pH (1969-70, 1971-72): Maximum, 12.0 Nov. 9, 1971; minimum, 4.5 Sept. 28, 1972.

Dissolved oxygen (1967-68, 1969-70, 1971-72): Maximum, 15.0 mg/l Dec. 2, 3, 23, 1971, Mar. 11, 1972; minimum, 0.0 mg/l on several days during July and August 1968.

Water temperatures: Maximum, 33.5°C June 28, 1971; minimum, freezing point on many days during winter periods.

REMARKS.--Continuous water-quality recorder operated since December 1966. Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or greater, due to instrument limitations. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice a year to further define the quality of water. Diamond Alkali Company and Painesville Sewage Disposal Plant are located just upstream from station. Records of discharge are given for Grand River near Madison, Ohio (station 04212000, drainage area 581 sq mi).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.						
07...	2.0	8.9	3180	1300	1200	5370
12...	2.5	11	13700	7800	7700	21300
NOV.						
16...	1.3	5.6	11900	6600	6600	18400
30...	1.6	6.9	380	190	120	660
DEC.						
08...	1.5	6.8	440	210	160	680
24...	1.2	5.3	2160	1100	1000	3020
JAN.						
01...	1.2	5.2	644	270	230	1030
29...	1.0	4.3	5460	2900	2900	8810
FEB.						
01...	1.7	7.6	4870	2400	2400	7430
23...	1.5	6.5	904	330	280	1240
MAR.						
03...	1.5	6.5	240	110	76	366
07...	1.3	5.9	1750	780	730	2560
APR.						
18...	1.0	4.6	320	140	100	498
21...	.60	2.7	2980	1600	1500	4950
MAY						
10...	1.6	7.3	408	150	91	668
30...	2.2	10	3030	1100	1000	5030
JUNE						
13...	3.1	14	2710	1000	910	4440
23...	1.4	6.0	490	250	220	801
JULY						
14...	1.8	7.9	1340	520	470	2220
27...	1.6	7.2	4860	2600	2500	8000
AUG.						
08...	1.9	8.2	2130	1000	960	3560
29...	2.5	11	7890	4100	4000	12500
SEP.						
06...	3.3	15	8250	4200	4100	12900
15...	2.0	8.6	1060	320	240	1710

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14000	4700	10500	6000	1200	1000	1260	850	9500	5800	1900	1320
2	12200	5400	6100	5000	2100	1200	1710	1180	7100	2180	---	---
3	15700	5600	5100	2600	2500	2100	1750	1480	2300	1800	---	---
4	21000	11300	3500	2600	2700	2400	1850	1550	2010	1600	---	---
5	11800	5400	3100	2400	2600	2500	2410	1750	1760	1190	---	---
6	---	---	---	---	2700	1300	3210	2200	1450	1140	---	---
7	6000	4900	---	---	1300	800	4150	3200	1940	1370	---	---
8	14400	3800	13500	3800	800	700	4380	3300	2480	1760	1500	400
9	15100	4500	15500	12400	900	800	4390	3100	3400	2210	500	400
10	4900	2200	12900	3300	1200	900	3380	2410	3600	2600	700	500
11	3900	3100	9600	3000	1300	1200	2800	2250	4100	2900	800	700
12	20900	3400	10000	3000	1400	1300	2600	2100	4300	3190	800	600
13	17100	8900	11000	2700	1700	1000	2820	2300	4300	3420	700	500
14	15700	11900	4700	4300	1200	1000	3480	2370	4100	2380	500	400
15	12200	7100	5300	4600	1200	740	6800	3000	2720	1600	400	400
16	9200	4300	19000	5100	780	650	9000	5200	1890	1360	500	400
17	12100	8500	19200	14200	1130	700	8800	4600	1640	1360	600	400
18	11500	6300	14600	10600	1300	1010	5300	3900	1800	1320	600	500
19	12700	4600	12600	9600	1490	1080	4400	1020	2300	1610	600	500
20	14700	6900	9800	3200	1680	1280	1800	1540	2990	2110	800	600
21	9300	4300	3600	2300	2200	1490	2100	1510	3000	1220	1100	800
22	15300	3900	2300	2000	2160	1630	2410	1920	1300	1080	1100	700
23	18700	11000	9500	2000	2390	1910	---	---	1320	1070	800	600
24	11500	5500	6500	5600	3500	2390	---	---	1420	1210	800	600
25	9000	5000	5600	2700	3430	2900	---	---	1800	1230	900	800
26	18100	5500	2800	1700	3700	2590	---	---	2050	1700	1000	900
27	22600	14800	1900	1600	2650	2200	---	---	2650	2000	1300	1000
28	15400	4300	1800	1200	3200	2100	---	---	2700	2190	1300	1200
29	19900	3800	1300	1000	2400	2100	9400	7300	2700	1900	1800	1300
30	21700	10300	1100	700	2410	650	10200	7400	---	---	2200	1600
31	11500	9400	---	---	1050	790	9600	5900	---	---	1900	1700
MONTH	22600	2200	19200	700	3700	650	10200	850	9500	1070	2200	400

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1900	1600	1800	1600	3650	2550	4400	3800	9800	8500	---	---
2	1800	1500	1800	1200	3300	2400	4800	4400	9800	9000	---	---
3	1600	1400	1500	1100	4400	2300	5750	4800	10000	9250	---	---
4	1600	1400	1600	1000	3200	2550	7100	5600	10000	7040	---	---
5	1400	1300	1200	1100	2950	1950	6000	5250	9700	4200	---	---
6	1400	1300	1400	1200	3400	2000	5250	3600	10200	7070	---	---
7	1800	1400	1600	1400	3200	2300	4000	2350	10700	1300	---	---
8	1450	1280	1720	1580	3400	2420	4200	3000	4800	2600	6200	5400
9	1610	1410	1600	750	3600	2420	4500	1950	5600	4600	12900	5400
10	1500	1300	870	650	3300	2450	2000	1300	8500	5300	9250	4100
11	1600	1290	900	650	2980	2380	2820	1700	8700	5300	11600	3600
12	1900	1600	1100	850	3650	2980	8000	1900	7700	6600	11000	5200
13	1870	980	1100	1010	4700	3150	8500	2500	8800	7400	6900	4700
14	1220	900	1550	1090	3900	1850	5750	2280	9500	8000	---	---
15	1420	450	1700	1500	2300	2000	3400	3300	10000	4300	---	---
16	510	340	2400	1580	2000	1050	3300	1950	7900	4050	7600	4100
17	360	330	2000	1500	1050	750	4500	3500	9550	5300	8850	7550
18	640	360	1550	1300	950	750	5400	4500	7500	4250	11150	8850
19	730	630	1600	1300	1200	920	3350	1850	12300	6300	10500	9050
20	800	600	2000	1580	2080	1230	4600	3250	10300	4200	10600	10000
21	3890	600	1850	1600	2380	2000	5500	4550	7750	4300	11300	5400
22	---	---	1800	1700	3600	2320	6100	5050	13000	5570	11000	7100
23	---	---	2180	1750	4500	880	6500	4700	13200	8000	11800	9100
24	---	---	2900	2100	1120	600	6750	6000	12200	7000	12800	9400
25	---	---	3100	2300	800	600	7250	4200	11300	6900	11700	10000
26	1000	800	2900	2350	1000	780	8400	4600	---	---	12850	10000
27	1200	800	3800	2400	1800	1000	8000	6450	---	---	5000	800
28	1600	1100	3700	3000	3200	1800	7750	4100	---	---	2850	1580
29	1500	1400	3600	3100	4000	2700	8600	7900	---	---	4700	1950
30	2000	1500	5500	3420	4200	2200	8600	7900	---	---	5100	1200
31	---	---	5200	3650	---	---	9500	7800	---	---	---	---
MONTH	3890	330	5500	650	4700	600	9500	1300	13200	1300	---	---
YEAR	22600	330										

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.2	6.9	8.1	7.9	10.5	7.9	8.2	7.3	9.2	8.9	8.4	7.2
2	7.1	6.9	8.1	7.8	10.0	7.9	11.0	8.0	9.1	8.0	---	---
3	8.0	6.8	10.9	7.8	8.8	8.4	10.1	8.0	8.6	7.7	---	---
4	10.9	7.9	8.2	7.5	8.8	8.6	9.5	8.3	8.8	8.1	---	---
5	9.5	7.6	7.9	7.6	8.8	8.5	8.8	8.4	8.7	7.7	---	---
6	---	---	---	---	8.6	7.1	9.2	8.4	8.6	7.6	---	---
7	7.8	7.3	---	---	9.6	7.6	9.1	8.7	9.4	8.6	---	---
8	7.8	7.5	11.0	8.0	8.8	7.2	10.6	8.9	9.3	8.5	8.4	6.5
9	7.7	7.3	12.0	10.6	9.0	7.2	10.2	8.7	9.0	8.5	8.5	7.6
10	8.0	7.5	10.7	7.7	9.0	7.5	9.5	8.1	8.9	8.1	8.5	6.7
11	8.4	7.8	8.4	7.8	9.4	8.3	10.8	8.5	8.7	8.4	7.8	6.9
12	11.2	7.8	11.1	8.0	9.7	8.4	9.1	8.5	8.7	8.2	7.3	7.0
13	10.7	8.2	11.1	8.0	9.0	8.2	8.7	8.5	8.7	8.5	7.2	6.8
14	10.6	8.0	8.8	7.9	8.9	8.2	8.9	8.5	8.6	8.5	6.9	6.7
15	8.3	7.8	10.0	7.6	9.4	8.2	11.0	7.9	9.1	8.5	7.6	6.7
16	8.4	7.9	11.0	7.6	8.5	7.7	11.3	7.1	9.9	8.2	7.1	6.7
17	9.0	7.7	11.2	8.5	8.9	7.6	8.6	7.9	9.6	9.0	7.8	6.8
18	8.5	7.8	9.8	7.5	8.8	8.0	9.0	8.0	9.3	8.8	7.8	6.9
19	10.6	7.8	10.5	7.4	9.1	8.5	9.1	8.4	9.1	8.3	7.0	6.9
20	8.9	8.0	11.2	7.5	9.3	8.7	9.2	8.8	9.3	8.6	7.4	7.0
21	8.9	8.0	11.1	7.7	9.3	8.7	9.2	8.6	9.1	8.5	8.3	7.3
22	8.4	8.0	9.8	8.1	9.2	8.4	9.0	8.7	9.0	7.6	8.5	7.6
23	9.3	7.9	12.0	8.1	9.1	8.2	---	---	9.0	7.9	8.3	7.4
24	8.5	8.0	10.8	8.4	8.8	8.4	---	---	9.0	7.9	7.9	7.3
25	9.2	8.1	8.7	8.3	8.8	8.4	---	---	8.6	7.9	7.7	7.3
26	8.3	8.0	11.8	8.4	8.8	8.0	---	---	8.6	8.0	8.1	7.5
27	11.1	8.3	11.5	8.4	9.0	8.5	---	---	9.3	8.2	8.5	7.7
28	9.7	8.0	9.9	8.2	9.3	8.4	---	---	8.9	8.6	8.1	7.4
29	11.2	8.2	9.3	8.2	8.8	8.4	9.4	9.3	8.8	8.2	9.5	7.4
30	11.2	8.6	9.4	8.2	8.6	7.8	9.4	9.1	---	---	10.3	8.5
31	9.2	8.1	---	---	8.4	7.2	9.4	8.9	---	---	9.2	8.3
MONTH	11.2	6.8	12.0	7.4	10.5	7.1	11.3	7.1	9.9	7.6	10.3	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.9	8.3	9.8	6.4	7.9	6.3	7.5	7.1	7.2	6.8	7.9	7.0
2	8.9	8.6	8.6	6.5	7.7	7.4	7.2	7.1	7.2	7.1	7.2	6.9
3	8.7	8.0	8.8	7.1	7.8	6.3	8.1	6.8	7.2	6.6	7.2	6.8
4	8.1	7.7	8.3	6.8	7.6	7.3	7.7	7.0	7.3	6.8	7.2	7.0
5	8.2	7.7	8.0	6.9	7.6	6.6	7.6	7.1	7.2	6.5	8.0	6.9
6	8.5	7.4	8.3	7.5	7.3	6.5	8.0	7.1	7.2	7.1	7.2	6.6
7	8.6	7.9	8.4	7.5	7.7	6.9	7.5	7.1	7.3	7.2	7.4	7.1
8	7.9	7.4	8.1	7.4	7.7	6.5	8.2	7.2	7.4	7.2	7.2	6.8
9	8.3	7.6	7.4	6.8	7.7	6.9	9.3	7.1	7.4	6.6	7.3	6.9
10	8.3	6.6	7.7	7.0	7.2	6.7	8.5	6.9	7.3	7.2	7.3	7.0
11	9.0	7.4	8.1	6.3	7.1	6.2	7.5	6.6	7.4	6.8	7.1	7.0
12	9.0	7.2	7.5	6.2	7.0	6.1	7.8	7.3	7.3	6.8	7.3	7.0
13	8.6	6.7	8.8	6.7	7.1	6.4	7.6	7.0	7.3	7.2	7.4	6.8
14	7.5	7.0	7.5	7.2	7.1	6.5	8.5	6.9	7.4	7.2	---	---
15	8.6	6.7	8.1	6.6	7.4	6.0	7.3	6.9	7.5	6.7	---	---
16	6.9	6.4	7.4	7.0	7.4	6.7	7.4	7.0	7.5	6.7	7.5	7.2
17	6.4	6.0	8.0	6.7	7.3	7.1	8.0	7.0	7.2	7.1	7.5	7.3
18	7.2	6.4	7.8	6.6	7.9	7.1	7.1	7.0	7.4	7.0	10.9	7.2
19	7.0	6.6	7.8	6.8	7.3	6.3	7.5	6.5	7.3	6.9	9.8	7.4
20	6.7	6.5	7.7	5.8	7.3	6.6	7.0	6.8	7.4	7.1	8.0	7.5
21	8.2	6.5	8.1	7.3	8.1	6.2	7.7	6.7	7.3	7.1	8.0	7.6
22	8.5	8.4	7.8	6.4	7.6	6.2	8.6	7.1	7.2	6.9	7.8	7.3
23	8.4	8.3	7.8	6.6	7.2	6.0	7.7	7.0	7.4	7.2	7.5	7.0
24	8.6	8.3	7.5	6.3	8.5	6.6	7.6	7.1	7.3	7.1	7.4	7.0
25	8.4	6.6	7.3	6.2	8.5	6.5	8.6	6.8	7.2	6.9	7.8	7.3
26	7.5	5.6	7.4	7.1	6.6	6.6	7.5	7.1	7.2	6.4	8.0	4.6
27	7.4	5.6	10.2	5.9	9.5	6.7	7.5	7.1	7.2	7.1	8.0	5.3
28	7.5	6.5	7.8	7.3	7.2	6.8	7.5	7.1	7.2	6.8	7.1	4.5
29	7.7	6.5	7.3	6.2	8.0	6.5	7.3	7.1	7.1	6.8	7.6	4.7
30	8.4	7.5	8.2	7.1	8.9	6.9	7.3	7.1	8.6	6.9	7.7	7.4
31	---	---	7.5	6.5	---	---	7.3	6.8	7.2	6.9	---	---
MONTH	9.0	5.6	10.2	5.8	9.5	6.0	9.3	6.5	8.6	6.4	10.9	4.5
YEAR	12.0	4.5										

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.2	4.1	7.3	6.9	14.2	13.2	12.8	12.7	13.2	12.9	13.5	12.3
2	5.5	3.0	7.1	6.4	15.0	12.2	12.7	12.5	13.0	12.8	---	---
3	4.8	2.2	7.4	6.3	15.0	13.4	13.0	12.6	13.1	12.7	---	---
4	6.4	3.4	8.3	6.8	13.5	13.2	13.0	12.9	13.7	12.8	---	---
5	6.5	5.3	8.6	8.2	---	---	13.1	12.1	13.8	13.7	---	---
6	---	---	---	---	---	---	12.2	11.8	13.8	13.4	---	---
7	6.4	5.6	---	---	---	---	12.1	11.4	13.5	13.4	---	---
8	7.1	5.6	11.9	11.3	---	---	12.3	11.6	13.5	13.4	14.8	13.4
9	6.6	5.2	12.1	11.7	---	---	12.1	11.5	13.5	13.1	14.9	11.8
10	7.9	5.2	12.9	11.4	---	---	12.7	11.5	13.2	12.9	12.1	11.6
11	8.2	7.5	12.4	11.9	---	---	12.1	11.0	13.2	12.6	15.0	11.6
12	9.1	8.0	12.4	11.7	---	---	11.1	10.4	12.8	12.4	14.5	11.4
13	9.2	8.7	12.2	11.3	---	---	12.1	10.5	12.7	12.2	11.8	11.5
14	9.0	8.4	12.0	11.3	---	---	12.4	11.5	13.1	12.2	11.7	11.6
15	8.7	8.0	11.9	10.7	11.7	11.3	12.4	11.9	13.4	13.0	11.8	11.7
16	8.2	6.9	11.5	10.5	11.9	11.4	12.8	11.5	13.7	13.4	11.9	11.6
17	7.8	6.5	11.9	11.0	12.0	11.7	12.0	11.5	13.7	13.5	11.8	11.5
18	7.1	5.7	11.9	10.8	12.8	12.0	12.0	11.7	13.6	13.3	12.0	11.8
19	6.8	4.6	11.2	10.1	12.3	12.1	12.6	11.7	13.5	13.4	12.1	11.7
20	7.6	5.9	11.6	9.5	12.2	11.9	12.7	12.2	13.5	13.4	12.0	11.3
21	7.6	5.2	11.9	9.1	12.3	12.1	12.5	12.4	13.5	13.2	11.6	10.9
22	7.3	5.1	12.2	11.7	12.7	12.3	12.5	12.3	13.7	13.3	11.3	10.6
23	7.4	3.7	12.9	12.3	15.0	12.7	---	---	13.7	13.3	11.9	11.3
24	7.1	4.8	12.9	12.6	13.4	12.7	---	---	13.3	13.2	12.2	11.9
25	5.8	4.2	12.9	12.5	12.8	12.5	---	---	13.3	13.2	12.4	12.0
26	5.9	4.2	12.8	12.4	12.9	12.0	---	---	13.4	13.3	12.3	11.8
27	7.0	3.5	12.7	12.2	12.6	12.0	---	---	13.3	12.9	12.0	11.7
28	7.5	5.9	12.8	12.5	12.5	11.7	---	---	13.1	12.9	11.8	11.6
29	8.3	6.7	12.9	12.5	12.8	12.5	13.1	12.9	13.2	12.8	11.6	11.2
30	8.6	6.7	13.4	12.6	12.7	12.5	13.1	12.8	---	---	11.7	11.4
31	8.5	7.2	---	---	12.7	12.4	13.1	12.8	---	---	11.7	11.4
MONTH	9.2	2.2	13.4	6.3	---	---	13.1	10.4	13.8	12.2	15.0	10.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.4	11.2	9.7	8.5	8.2	6.4	9.3	8.5	---	---	5.2	0.6
2	11.5	11.2	9.8	8.5	8.7	8.0	8.5	8.0	---	---	4.8	3.5
3	11.6	11.1	10.4	8.4	8.9	7.7	8.2	7.4	---	---	5.2	3.7
4	11.8	10.8	10.0	8.7	8.6	6.9	9.0	7.6	---	---	5.9	2.8
5	12.1	11.5	11.8	9.3	8.1	6.2	9.0	8.3	---	---	5.8	4.4
6	11.8	11.3	10.7	8.7	7.9	5.6	10.0	8.7	---	---	6.2	4.0
7	11.7	11.3	10.2	8.1	7.6	5.1	9.8	9.0	8.4	5.2	5.4	2.8
8	12.3	11.2	10.1	8.5	7.3	5.3	10.3	8.8	8.2	7.6	5.2	2.1
9	12.2	11.3	10.6	9.1	6.3	5.4	9.9	8.6	7.6	7.3	5.5	2.2
10	11.6	10.3	11.0	10.3	5.9	2.5	9.9	8.1	7.6	6.8	5.1	2.4
11	11.8	9.7	10.8	9.7	3.0	2.1	9.8	7.1	7.3	5.6	4.7	1.7
12	11.8	9.5	10.6	9.4	2.6	1.1	9.7	6.2	6.6	5.3	4.4	2.6
13	11.2	8.8	10.3	9.1	6.9	3.7	8.0	6.7	6.3	5.6	4.3	1.9
14	10.1	9.0	10.3	8.7	6.1	3.6	7.4	6.6	6.5	5.4	---	---
15	10.4	9.5	9.9	8.0	6.6	5.7	7.9	6.7	6.3	5.5	---	---
16	10.6	10.2	9.9	7.6	8.2	6.4	8.9	7.2	6.8	5.3	8.0	7.0
17	10.6	10.2	10.1	7.9	8.7	8.0	9.0	8.3	5.4	4.8	7.1	5.8
18	10.6	10.0	9.7	7.9	8.7	8.1	8.8	8.0	4.8	3.6	6.8	5.6
19	10.3	9.7	9.0	7.4	8.1	7.6	10.8	8.0	4.6	3.8	6.8	5.7
20	10.5	9.7	8.9	7.4	7.6	6.6	9.8	8.6	4.7	1.6	5.9	5.5
21	10.7	10.4	9.0	7.2	7.3	5.8	8.6	6.8	2.7	1.3	6.2	5.3
22	10.7	10.4	8.4	6.4	7.1	6.4	6.8	5.8	4.9	1.3	6.3	5.3
23	10.8	10.4	7.9	6.0	10.4	6.8	7.4	5.2	5.4	3.7	6.4	5.2
24	10.7	10.4	7.9	6.2	10.6	9.8	9.4	5.2	5.5	4.0	6.1	5.2
25	10.6	10.4	7.6	5.9	10.0	9.8	7.9	4.2	4.7	3.6	6.0	5.2
26	10.5	9.9	6.4	5.3	10.2	9.9	7.4	5.7	5.9	3.3	6.7	4.9
27	10.3	9.7	7.9	6.5	10.1	9.3	6.8	5.0	5.0	3.4	7.9	6.5
28	10.4	9.6	7.3	5.7	9.4	8.7	6.8	4.8	6.5	3.5	8.1	7.5
29	10.3	9.4	6.3	5.1	9.0	8.2	---	---	6.3	3.5	7.5	7.0
30	10.2	9.1	6.8	5.6	9.5	9.0	---	---	4.6	2.8	8.9	6.9
31	---	---	6.5	5.2	---	---	---	---	3.7	0.8	---	---
MONTH	12.3	8.8	11.6	5.1	10.6	1.1	10.8	4.2	8.4	0.8	8.9	0.6
YEAR	15.0	0.6										

04212200 GRAND RIVER AT PAINESVILLE, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	28.0	26.0	22.0	20.0	4.0	3.0	3.5	3.0	3.5	2.5	1.5	0.0
2	29.0	27.0	22.0	21.0	3.0	2.5	3.5	2.5	4.0	3.0	---	---
3	28.5	27.5	21.5	18.5	3.0	2.5	2.5	2.0	4.0	2.5	---	---
4	28.5	26.5	18.5	15.5	4.0	2.5	2.0	2.0	2.5	0.5	---	---
5	27.5	25.5	16.0	14.0	4.5	3.0	2.5	2.0	1.5	0.0	---	---
6	---	---	---	---	5.0	4.0	2.0	0.5	1.5	1.0	---	---
7	27.5	24.5	---	---	5.0	4.0	2.5	1.0	1.5	1.0	---	---
8	24.5	23.5	11.5	10.0	5.5	5.0	3.0	1.5	2.5	1.0	1.0	0.0
9	23.5	23.0	10.0	9.5	6.0	5.5	3.5	1.5	2.5	1.5	0.0	0.0
10	23.0	18.5	11.5	9.0	7.5	5.5	3.5	1.5	3.5	1.5	0.5	0.0
11	18.5	16.5	11.5	10.0	8.0	6.0	2.5	1.5	3.5	1.0	1.5	0.0
12	18.0	15.5	11.0	10.0	6.0	5.0	1.5	1.0	4.0	2.5	3.5	1.5
13	18.0	15.5	12.0	10.5	6.5	5.0	2.5	1.5	3.5	2.5	3.0	2.5
14	19.0	17.0	14.0	11.0	5.0	4.5	1.5	0.0	3.0	0.5	3.0	2.5
15	22.0	18.0	16.0	13.0	7.5	4.5	1.5	0.0	1.0	0.5	2.5	2.0
16	22.5	20.5	16.5	15.0	7.5	5.0	2.0	0.5	1.0	0.0	2.5	2.5
17	23.0	22.0	16.0	14.0	5.5	4.0	2.5	1.0	1.0	0.5	2.5	2.5
18	24.0	21.5	17.5	14.5	4.0	3.0	2.5	2.0	1.0	0.5	2.5	2.0
19	24.0	22.5	18.0	14.5	3.5	2.5	3.0	0.0	2.5	0.5	4.0	1.0
20	23.5	21.0	15.0	12.5	3.5	3.5	1.0	0.5	2.0	0.5	5.0	2.5
21	25.0	22.5	13.5	6.5	3.5	3.0	2.0	1.0	2.5	0.5	6.5	4.0
22	24.0	23.0	6.5	3.5	3.0	2.5	2.0	1.0	1.5	0.5	7.5	5.0
23	24.5	23.0	5.0	3.5	3.5	2.0	---	---	2.5	1.0	5.0	3.0
24	24.5	23.0	5.0	4.5	5.5	3.5	---	---	3.0	2.0	3.5	2.5
25	24.0	23.5	5.0	4.0	5.5	4.0	---	---	2.5	1.0	3.5	2.5
26	24.5	23.0	5.5	4.0	6.5	5.0	---	---	2.5	1.5	4.0	2.5
27	24.0	21.5	5.0	4.5	6.5	5.5	---	---	4.0	2.5	4.5	3.5
28	22.5	21.5	5.0	4.5	6.5	5.0	---	---	4.0	3.0	6.0	4.0
29	23.5	21.0	5.0	4.0	5.0	3.5	3.0	2.5	4.0	1.5	5.5	4.5
30	22.5	20.5	4.5	3.5	5.0	4.0	3.0	2.0	---	---	5.0	4.0
31	22.5	20.0	---	---	4.5	4.0	3.0	2.0	---	---	7.0	4.5
MONTH	29.0	15.5	22.0	3.5	8.0	2.0	3.5	0.0	4.0	0.0	7.5	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.5	18.0	16.0	21.0	19.0	23.5	19.5	29.5	25.5	31.5	30.0
2	7.5	5.5	18.5	16.5	21.0	19.0	24.0	23.0	31.0	20.5	31.5	29.5
3	9.5	7.0	18.5	17.0	23.0	19.5	24.0	23.0	30.5	21.0	29.5	26.5
4	9.0	7.5	18.0	15.0	24.5	22.0	24.0	22.0	29.5	21.0	29.0	26.5
5	8.0	6.0	17.0	14.0	25.5	23.0	23.5	21.0	26.5	23.5	29.0	27.0
6	8.5	7.0	18.5	16.0	25.5	23.0	21.0	18.5	27.0	21.5	29.5	27.0
7	7.0	5.0	18.5	16.5	24.5	22.0	22.0	19.5	26.5	19.0	29.5	25.5
8	---	---	17.0	14.5	25.0	23.5	22.0	19.5	21.5	20.5	28.5	28.5
9	---	---	14.5	11.0	25.0	24.0	23.5	21.0	21.5	20.5	28.5	26.5
10	---	---	13.5	10.5	24.0	19.5	24.0	21.5	24.5	20.5	28.5	26.0
11	---	---	15.0	11.0	22.0	21.0	27.5	23.5	25.0	23.5	28.5	27.0
12	---	---	16.0	13.5	24.0	21.5	28.0	26.0	26.5	25.5	28.5	27.5
13	14.5	13.0	16.5	15.5	26.5	23.0	28.5	24.0	28.5	26.0	28.0	26.0
14	14.5	12.0	18.0	16.0	26.5	25.0	27.0	25.0	29.0	28.0	---	---
15	13.0	11.0	19.0	17.0	26.5	24.5	28.0	26.0	29.0	27.0	---	---
16	13.0	10.5	19.0	18.0	25.0	22.0	26.0	23.0	28.5	26.5	23.0	20.0
17	12.0	10.0	19.0	17.5	22.0	21.0	26.5	24.0	29.0	28.0	26.0	22.0
18	14.0	10.5	21.0	18.0	23.0	20.5	28.5	24.0	30.5	28.5	26.0	24.5
19	14.5	12.0	21.5	20.0	25.5	22.0	24.5	22.0	30.5	29.5	26.0	24.5
20	---	---	21.5	20.5	25.5	24.0	27.0	24.0	31.5	29.5	25.5	24.0
21	---	---	22.0	19.5	25.5	23.0	29.0	26.5	30.5	29.5	25.0	23.0
22	---	---	23.0	21.0	23.0	19.5	30.5	28.5	30.5	28.0	24.0	22.0
23	---	---	23.0	21.0	19.5	11.5	31.0	26.5	29.0	28.0	24.5	23.0
24	13.0	11.0	24.0	21.0	14.5	13.0	31.5	30.0	30.5	28.5	25.5	23.5
25	13.0	10.5	24.0	22.0	14.0	13.0	30.0	27.5	31.5	29.5	25.5	23.0
26	13.5	11.5	23.0	21.0	16.0	13.5	29.5	27.5	31.5	30.0	26.5	20.5
27	14.0	12.0	23.0	21.5	18.5	15.0	30.5	28.5	31.0	28.5	22.0	19.0
28	15.5	13.0	23.5	22.0	18.5	17.0	29.0	28.0	29.5	28.0	21.0	18.0
29	16.0	14.0	24.0	22.0	21.0	19.5	29.5	28.5	30.5	28.5	21.5	18.5
30	16.5	15.0	23.5	22.5	19.5	18.5	29.5	25.0	30.5	28.5	19.5	13.5
31	---	---	22.5	21.0	---	---	29.0	15.0	30.5	28.5	---	---
MONTH	---	---	24.0	10.5	26.5	11.5	31.5	15.0	31.5	19.0	31.5	13.5
YEAR	31.5	0.0										

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO

LOCATION.--Lat 41°54'00", long 80°47'44", in T.13 N., R.3 W., Ashtabula County, on right bank at Jack's Automarine, 600 ft upstream from bridge on State Highway 531, 4,000 ft upstream from mouth, and 4,000 ft downstream from Fields Brook, in Ashtabula.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1968 to September 1972.
Water temperatures: June 1968 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 1,860 micromhos Nov. 5; minimum, 39 micromhos June 18.
Dissolved oxygen: Maximum, 13.9 mg/l Dec. 1, Jan. 20; minimum, 2.3 mg/l July 9.
Water temperatures: Maximum, 28.5°C July 23; minimum, 0.5°C on several days during December, February, and March.

Period of record:
Specific conductance (1968-69, 1970-72): Maximum, 2,980 micromhos Aug. 18, 1971; minimum, 39 micromhos June 18, 1972.
pH (1968-69): Maximum, 9.4 Feb. 27, 1969; minimum, 4.8 Oct. 30, 1968.
Dissolved oxygen (1970-72): Maximum, 15.0 mg/l Feb. 22-28, 1971; minimum, 0.0 mg/l Mar. 16, 17, 1971.
Water temperatures (1968-69, 1971-72): Maximum, 29.0°C Aug. 23, 24, 1968; minimum, freezing point on many days during 1968 and 1969.

REMARKS.--Continuous water-quality recorder operated since June 1968. Maximum recorded specific conductance value of 3,000 micromhos or greater occurred Aug. 20, 1970. Maximum recorded pH 11.7 occurred Aug. 22, 1970. Minimum recorded pH 4.4 occurred Sept. 28, 1970. Interruptions in the record were due to malfunctions of the instrument. In addition to the continuous recorder, samples were collected by a local observer on an approximate twice-weekly basis. Partial analyses were made on samples with the maximum specific conductance and the minimum specific conductance for each month. Special samples were also collected twice during the year to further define the quality of water. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT.												
07...	1525	110	0	98	270	.3	1.0	4.3	724	200	110	1260
12...	1200	76	0	84	130	.2	1.2	5.1	448	180	120	743
NOV.												
01...	1415	114	0	80	290	.2	1.4	6.2	662	240	150	1200
DEC.												
01...	0945	31	0	60	42	.1	2.1	9.1	186	98	72	339
15...	1125	54	0	87	140	.1	.80	3.4	380	160	120	663
JAN.												
10...	1130	54	0	76	130	.2	.50	2.2	396	160	120	646
27...	1100	34	0	48	40	.2	.60	2.8	184	110	82	285
FEB.												
08...	1545	40	0	51	42	.2	.80	3.6	198	95	62	309
22...	1115	48	0	64	92	.2	.60	2.8	316	130	90	507
MAR.												
01...	1600	63	0	62	77	.1	1.0	4.7	276	140	88	479
02...	1130	47	0	33	24	.1	1.9	8.6	138	82	44	218
APR.												
06...	1135	50	0	69	89	.1	.80	3.6	306	130	89	524
18...	1005	30	0	43	34	.1	1.1	4.8	168	71	46	262
MAY												
10...	1130	50	0	41	39	.2	.90	3.8	190	88	47	295
JUNE												
01...	1430	94	0	57	200	.3	.90	4.0	538	190	110	916
24...	1200	26	0	30	24	.1	2.0	8.7	130	62	40	192
JULY												
08...	1630	66	0	49	110	.4	1.0	4.6	380	170	120	580
27...	1400	82	0	65	140	.4	1.2	5.4	442	180	110	735
SEP.												
06...	1830	108	0	50	140	.5	1.0	4.6	438	180	92	737
15...	0930	88	0	100	420	.6	1.4	6.4	1000	340	270	1690

DATE	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.												
07...	0	300	10	4	1	21	2	1	320	90	.5	6.0
JUNE												
07...	--	--	--	--	--	--	--	--	--	--	1.3	4.0

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1500	1050	1260	1040	378	279	412	298	399	357	677	314
2	1640	1120	1340	1100	360	288	545	412	402	339	368	182
3	1680	1400	1400	1150	477	345	558	435	519	333	253	181
4	1400	894	1680	1330	648	444	553	343	801	462	285	240
5	1180	900	1860	1100	696	582	587	369	774	378	294	270
6	1160	1010	1100	765	687	381	573	366	414	333	279	254
7	1340	1110	941	752	381	258	675	573	360	315	316	262
8	1490	1320	922	505	258	210	672	621	366	285	480	228
9	1590	1420	705	528	315	237	678	663	294	267	260	227
10	1690	1260	713	539	429	309	753	588	330	279	230	202
11	1260	771	805	562	483	402	612	387	390	324	231	213
12	825	714	651	543	429	369	465	369	480	378	283	229
13	795	744	621	507	510	429	402	378	456	366	366	279
14	786	681	680	527	570	402	633	375	618	393	317	209
15	789	414	682	595	711	276	645	384	603	441	244	217
16	696	363	687	546	297	246	555	378	450	363	387	234
17	492	360	800	587	385	295	648	552	387	309	308	212
18	645	408	955	775	419	374	---	---	357	291	342	228
19	738	531	987	894	525	405	720	411	393	315	338	239
20	918	594	1030	923	706	418	411	342	474	348	445	298
21	1010	720	949	520	722	425	381	315	426	324	468	348
22	1280	765	520	315	456	336	435	345	585	396	548	317
23	1310	849	494	359	460	352	471	327	498	402	334	253
24	963	735	532	430	626	443	465	336	452	347	341	278
25	879	555	627	450	672	459	471	324	395	356	340	304
26	1150	687	677	545	802	466	360	312	415	337	336	261
27	1190	1080	748	649	494	371	348	273	403	319	425	314
28	1230	735	747	474	468	378	378	258	522	339	556	424
29	1250	741	635	401	496	385	393	342	642	333	512	446
30	1190	795	664	298	512	275	411	384	---	---	514	460
31	1060	819	---	---	306	282	405	372	---	---	531	498
MONTH	1690	360	1860	298	802	210	753	258	801	267	677	181

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	530	455	807	603	961	706	735	471	1280	843	---	---
2	604	523	1030	771	946	595	789	471	1280	873	---	---
3	618	591	987	462	928	583	702	522	1020	900	---	---
4	730	610	579	429	835	490	990	702	1180	1010	---	---
5	738	567	561	507	763	565	828	675	1190	573	---	---
6	624	518	---	---	895	520	786	660	1150	750	828	615
7	699	624	---	---	963	648	735	462	1160	945	846	648
8	660	498	---	---	876	504	633	495	1400	1160	---	---
9	609	354	---	---	831	642	753	549	---	---	---	---
10	480	390	367	274	756	639	807	342	---	---	---	---
11	738	462	395	287	942	618	552	342	---	---	---	---
12	858	696	475	373	921	843	582	417	---	---	---	---
13	861	648	545	455	1230	891	681	465	---	---	---	---
14	660	384	526	367	1400	903	687	540	---	---	---	---
15	582	345	575	398	993	645	738	600	---	---	1690	1400
16	393	228	504	411	825	369	810	696	---	---	1430	1120
17	297	177	455	299	303	42	738	570	---	---	1120	1060
18	345	237	546	366	507	39	900	624	---	---	1060	1050
19	477	315	499	367	639	450	888	138	---	---	1070	960
20	564	438	627	390	789	471	387	141	---	---	1130	598
21	441	297	649	349	633	438	549	321	---	---	915	636
22	507	303	593	251	660	507	642	408	---	---	1040	800
23	513	369	382	142	1320	120	759	459	---	---	1110	914
24	459	345	668	59	216	117	660	528	---	---	1200	960
25	546	459	556	358	207	141	699	612	---	---	1560	1100
26	507	408	734	242	372	180	744	648	---	---	1490	1360
27	681	447	705	348	456	246	861	741	---	---	1440	1260
28	651	558	794	389	513	330	900	678	---	---	1260	769
29	720	483	945	468	552	399	873	729	---	---	856	760
30	813	579	760	424	636	444	900	717	---	---	1040	266
31	---	---	792	600	---	---	954	657	---	---	---	---
MONTH	861	177	1030	59	1400	39	990	138	---	---	---	---
YEAR	1860	39										

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.3	7.9	7.7	7.2	6.9	6.5	6.4	7.6	7.5	7.6	6.9
2	7.5	7.3	8.0	7.9	7.7	7.1	6.6	6.4	7.8	7.6	7.8	6.9
3	7.3	7.2	8.0	7.9	7.4	6.7	6.7	6.5	8.0	7.6	7.1	6.6
4	7.5	7.5	8.2	8.0	7.2	5.9	6.6	6.5	7.8	7.5	7.2	7.1
5	7.5	7.4	8.1	8.1	6.4	5.7	7.3	6.3	7.5	7.3	7.2	7.2
6	7.4	7.4	8.5	8.1	7.2	6.4	7.7	7.2	7.4	7.3	7.2	7.0
7	7.4	7.4	8.4	8.3	7.8	6.4	7.8	7.4	7.6	7.0	7.2	7.1
8	7.4	7.4	8.6	8.3	6.7	6.3	7.6	7.2	7.2	7.0	7.3	7.2
9	7.4	7.3	8.6	8.4	6.9	6.6	7.5	7.3	7.0	6.8	7.3	7.1
10	7.3	7.3	8.6	8.4	7.0	6.7	7.8	7.1	6.9	6.8	7.3	7.2
11	7.5	7.3	9.1	8.4	7.1	6.9	7.4	7.0	6.9	6.7	7.3	7.2
12	7.6	7.5	8.9	8.3	7.1	7.0	7.6	7.1	7.2	6.9	7.3	7.2
13	7.6	7.5	8.6	8.3	7.9	7.0	7.5	7.2	7.4	7.1	7.5	7.3
14	7.7	7.5	9.0	8.2	7.1	7.0	7.6	7.3	7.5	7.1	7.4	7.2
15	8.1	7.5	8.3	8.0	8.2	6.9	7.5	7.3	7.2	6.9	7.3	7.2
16	8.2	7.7	8.3	8.2	6.9	6.6	7.8	7.5	7.0	6.8	7.5	7.3
17	8.2	7.8	8.8	8.1	7.0	6.2	7.8	7.6	7.0	6.9	7.4	7.3
18	7.8	7.4	8.2	8.1	7.7	6.7	7.9	7.7	6.9	6.9	7.3	7.3
19	8.1	7.3	8.2	8.0	7.0	6.9	7.7	7.1	7.0	6.9	7.4	7.2
20	8.5	7.2	8.2	8.1	7.1	6.9	7.5	7.1	7.0	7.0	7.4	7.3
21	7.3	7.2	8.7	8.2	6.9	6.7	7.8	7.1	7.0	6.9	7.4	7.3
22	7.3	7.2	8.3	8.1	7.3	6.5	7.9	7.3	7.1	7.0	7.5	7.3
23	7.3	7.2	8.1	7.9	6.7	6.7	7.8	7.2	7.2	7.0	7.5	7.4
24	7.4	7.2	8.0	7.9	6.9	6.7	7.3	7.1	7.1	7.0	7.4	7.4
25	7.6	7.3	8.9	7.8	6.8	6.3	7.8	7.1	7.0	6.9	7.4	7.4
26	7.5	7.2	7.8	7.7	6.9	6.5	7.3	7.1	7.5	7.0	7.4	7.4
27	7.3	7.2	7.7	7.6	6.9	6.6	7.1	7.0	7.7	7.2	7.5	7.4
28	7.6	7.3	7.7	6.0	6.9	6.6	7.2	7.1	7.6	7.2	7.5	6.9
29	7.7	7.4	7.4	6.3	7.4	6.6	7.2	7.0	7.7	7.2	7.5	7.4
30	7.8	7.5	7.8	7.0	7.2	6.4	7.2	7.1	---	---	7.5	7.4
31	7.8	7.7	---	---	6.5	6.3	7.5	7.2	---	---	7.5	7.4
MONTH	8.5	7.2	9.1	6.0	8.2	5.7	7.9	6.3	8.0	6.7	7.8	6.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.5	---	---	---	---	7.2	7.0	7.9	7.5	---	---
2	7.6	7.5	---	---	---	---	7.3	7.2	7.7	7.5	---	---
3	7.5	7.5	---	---	---	---	7.3	7.2	7.5	7.5	---	---
4	7.5	7.4	---	---	---	---	7.3	7.2	7.7	7.5	---	---
5	7.5	7.4	---	---	---	---	7.5	7.3	8.1	7.6	---	---
6	7.5	6.9	---	---	---	---	7.5	7.3	7.9	7.6	7.9	7.8
7	7.3	7.0	---	---	---	---	7.4	7.2	7.6	7.2	8.0	7.8
8	7.6	7.3	---	---	---	---	7.5	7.3	7.5	7.5	---	---
9	8.2	7.4	---	---	7.7	7.6	7.6	7.1	---	---	---	---
10	8.0	7.8	---	---	7.7	7.6	7.5	7.0	---	---	---	---
11	7.8	7.3	---	---	7.7	7.6	7.2	6.7	---	---	---	---
12	7.4	7.2	---	---	7.6	7.5	7.2	6.8	---	---	---	---
13	7.3	7.1	---	---	7.4	7.1	7.0	6.9	---	---	---	---
14	7.3	7.1	---	---	7.4	6.8	7.0	6.9	---	---	---	---
15	7.2	7.0	---	---	7.2	7.1	7.1	6.9	---	---	7.1	7.0
16	7.4	6.8	---	---	7.3	7.2	7.1	6.9	---	---	7.3	7.0
17	6.8	6.7	---	---	7.3	7.2	7.1	6.9	---	---	7.1	6.9
18	7.0	6.8	---	---	7.5	7.3	7.1	6.9	---	---	7.2	7.0
19	---	---	---	---	7.4	7.3	7.0	6.7	---	---	7.2	7.1
20	---	---	---	---	7.7	7.2	6.8	6.6	---	---	7.6	7.2
21	---	---	---	---	7.4	7.1	6.9	6.7	---	---	7.5	7.2
22	---	---	---	---	7.3	7.2	6.9	6.7	---	---	7.2	7.2
23	---	---	---	---	7.2	6.4	7.2	6.9	---	---	7.2	7.2
24	---	---	---	---	6.7	6.4	7.3	7.2	---	---	7.2	6.4
25	---	---	---	---	7.0	6.5	7.4	7.2	---	---	7.1	6.9
26	---	---	---	---	8.5	6.7	7.4	7.3	---	---	7.0	6.4
27	---	---	---	---	7.3	7.0	7.7	7.3	---	---	7.0	6.8
28	---	---	---	---	7.3	7.0	7.6	7.3	---	---	7.0	6.7
29	---	---	---	---	7.2	7.0	7.6	7.4	---	---	7.0	6.7
30	---	---	---	---	7.2	7.0	7.7	7.4	---	---	7.1	6.6
31	---	---	---	---	---	---	8.0	7.5	---	---	---	---
MONTH	---	---	---	---	---	---	8.0	6.6	---	---	---	---

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.6	3.1	3.9	3.4	13.9	13.6	12.6	12.3	13.3	13.2	11.7	10.5
2	4.3	3.4	3.6	3.2	13.6	13.3	12.6	12.0	13.4	13.2	12.5	9.1
3	3.8	2.9	4.4	3.2	13.6	13.2	12.4	12.0	13.3	12.8	12.7	12.0
4	5.9	5.3	4.0	3.7	13.3	12.6	12.6	12.1	13.1	12.3	12.4	12.0
5	5.6	4.8	7.9	3.6	12.6	12.1	12.6	12.2	13.3	12.5	12.3	12.1
6	4.8	4.2	9.6	7.3	12.4	12.1	12.5	12.1	13.4	13.2	12.3	11.9
7	5.4	4.5	9.5	9.0	12.2	11.7	12.3	11.9	13.3	13.0	12.1	11.7
8	5.6	4.8	10.8	9.4	11.8	11.7	12.0	11.9	13.3	12.9	12.6	11.3
9	5.0	4.5	11.2	10.5	11.8	11.4	12.0	11.9	12.9	12.5	12.8	12.4
10	6.2	4.8	11.0	10.5	11.4	10.8	12.1	11.8	12.8	12.5	12.6	12.4
11	9.2	6.2	10.9	10.4	10.9	10.0	12.6	12.1	12.7	12.4	12.4	12.1
12	9.4	8.8	11.0	10.6	11.3	10.4	12.6	12.3	12.6	12.2	12.2	11.4
13	9.2	8.9	10.8	10.0	11.5	11.1	12.6	12.2	12.7	12.4	12.3	11.1
14	9.0	8.5	10.0	9.7	11.8	11.1	12.3	12.0	12.6	12.2	12.3	12.0
15	9.5	8.4	9.9	8.6	11.6	11.0	12.7	12.3	12.5	12.2	12.4	11.9
16	10.4	9.0	8.7	7.8	11.0	10.6	13.5	12.7	12.8	12.3	11.9	11.3
17	10.3	8.9	7.8	7.3	11.0	10.7	13.2	12.4	12.9	12.4	11.6	11.4
18	9.0	7.8	7.3	6.7	11.8	11.0	13.0	12.5	12.8	12.5	11.9	11.4
19	8.2	7.4	6.7	4.9	12.0	11.8	12.9	12.0	12.7	12.4	12.2	11.7
20	7.7	7.0	6.2	5.0	12.0	11.5	13.9	12.9	12.6	12.3	12.3	11.3
21	7.1	5.9	9.4	6.0	11.9	11.4	13.3	13.1	12.6	6.3	11.8	10.9
22	6.5	5.3	10.7	9.4	12.7	11.9	13.3	12.8	7.9	6.6	10.9	10.0
23	5.5	4.0	11.3	10.7	12.8	12.6	12.8	11.9	10.4	6.5	11.5	10.7
24	5.8	4.6	11.6	11.3	12.7	12.3	12.8	12.7	9.8	7.1	13.4	10.9
25	6.6	4.8	11.8	11.6	12.3	11.6	13.4	12.5	11.2	8.0	12.8	11.1
26	5.6	3.8	11.9	11.7	11.6	11.1	13.6	13.4	11.0	9.0	12.7	11.2
27	4.0	3.6	12.2	11.9	11.6	11.1	13.7	13.5	10.3	9.2	12.9	11.0
28	5.8	3.5	12.3	11.9	11.6	10.9	13.5	13.2	11.4	10.2	12.6	10.9
29	5.7	4.2	12.5	12.3	12.0	11.6	13.4	13.1	12.0	10.5	11.2	10.8
30	5.4	3.1	13.6	12.3	12.2	11.3	13.2	13.1	---	---	11.2	10.7
31	4.7	3.5	---	---	12.3	11.8	13.3	13.1	---	---	12.1	10.7
MONTH	10.4	2.9	13.6	3.2	13.9	10.0	13.9	11.8	13.4	6.3	13.4	9.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.6	5.6	4.9	5.5	3.5	5.5	5.2	8.7	5.8	---	---
2	11.9	10.6	5.0	4.5	6.4	4.5	5.7	5.2	7.1	5.2	---	---
3	12.2	10.5	5.3	4.5	6.5	4.7	5.3	4.5	5.3	4.2	---	---
4	12.1	10.4	5.3	4.5	7.2	5.6	4.6	4.0	6.6	4.3	---	---
5	12.4	10.3	4.6	4.4	6.7	5.8	6.4	4.6	8.2	5.2	---	---
6	10.6	10.4	---	---	6.8	5.3	5.7	5.1	8.4	6.3	7.4	7.2
7	---	---	---	---	5.9	5.4	6.5	5.7	6.3	4.8	8.6	6.9
8	---	---	---	---	7.3	5.4	6.4	5.7	5.1	4.3	---	---
9	---	---	---	---	6.9	6.1	5.9	2.3	---	---	---	---
10	---	---	10.9	10.6	6.6	6.3	6.1	4.6	---	---	---	---
11	---	---	10.6	9.6	6.9	6.1	5.8	4.9	---	---	---	---
12	---	---	10.1	9.1	6.3	5.6	5.6	4.2	---	---	---	---
13	---	---	9.4	8.8	5.9	5.1	4.2	2.7	---	---	---	---
14	---	---	9.9	8.8	6.3	5.2	4.2	3.2	---	---	---	---
15	---	---	9.6	7.6	6.4	5.4	4.5	3.9	---	---	4.5	3.9
16	---	---	8.3	7.8	6.2	4.7	4.5	3.7	---	---	6.7	4.3
17	---	---	9.2	7.5	7.1	5.3	4.4	3.6	---	---	7.6	6.2
18	10.0	9.1	8.2	7.0	7.2	6.7	4.5	3.6	---	---	7.3	6.6
19	9.9	8.9	8.0	6.4	7.0	6.1	6.4	3.7	---	---	7.7	7.1
20	9.7	8.5	7.0	6.0	7.0	6.1	6.1	5.4	---	---	8.4	6.3
21	10.5	9.0	7.7	5.7	7.2	6.2	5.9	4.2	---	---	7.6	6.4
22	10.2	9.4	8.0	6.0	6.4	5.9	5.3	3.6	---	---	8.4	7.3
23	9.8	9.4	7.8	5.3	9.5	6.3	5.2	3.5	---	---	8.7	8.4
24	9.8	8.7	6.4	5.8	9.6	9.5	4.5	3.4	---	---	9.3	8.9
25	8.8	8.1	8.1	6.7	9.6	9.4	3.9	3.5	---	---	9.8	9.0
26	8.2	7.6	6.6	5.4	9.5	8.8	4.2	3.6	---	---	9.4	9.0
27	7.6	6.8	7.7	6.5	9.3	7.0	4.3	3.4	---	---	9.2	8.8
28	6.8	6.4	8.0	6.7	7.3	6.3	5.1	3.4	---	---	9.1	7.6
29	6.7	5.9	7.6	5.9	6.7	5.4	6.1	4.4	---	---	8.0	7.8
30	6.1	5.4	7.7	5.5	5.8	5.4	6.8	5.2	---	---	8.6	8.0
31	---	---	5.4	4.2	---	---	8.1	5.6	---	---	---	---
MONTH	---	---	10.9	4.2	9.6	3.5	8.1	2.3	---	---	---	---
YEAR	13.9	2.3										

04212700 ASHTABULA RIVER AT ASHTABULA, OHIO--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.5	18.0	2.5	1.5	3.5	2.0	2.5	2.5	2.0	1.5
2	---	---	18.5	17.5	2.0	0.5	3.5	2.0	2.5	1.0	1.0	0.5
3	---	---	18.0	17.0	1.5	0.5	3.5	2.0	3.0	1.0	1.5	0.5
4	---	---	17.0	15.5	2.5	0.5	4.0	2.0	3.5	2.5	1.5	1.5
5	---	---	15.5	10.5	3.0	2.0	2.5	2.0	3.5	2.0	1.5	1.5
6	---	---	11.5	8.5	4.5	3.0	2.5	2.0	2.5	2.5	1.5	1.0
7	20.0	19.5	9.5	8.0	5.5	4.5	3.5	2.5	2.5	1.0	2.0	1.0
8	19.5	18.5	8.0	5.5	6.5	5.5	3.0	2.5	2.0	1.0	2.0	1.5
9	19.0	18.0	7.0	5.0	7.0	6.0	4.0	3.0	1.5	0.5	2.0	1.5
10	18.0	16.0	7.0	5.5	9.0	7.0	4.5	3.5	1.5	1.0	2.0	1.0
11	16.0	13.5	7.5	5.5	10.0	9.0	3.5	2.5	1.5	0.5	2.0	1.5
12	13.5	13.0	7.0	6.0	9.0	6.0	3.5	2.5	2.0	1.0	2.5	2.0
13	13.5	13.0	8.5	6.5	6.0	5.0	3.5	3.0	1.5	1.0	3.0	2.5
14	14.0	13.5	8.5	7.5	6.0	4.0	3.5	2.5	2.0	1.0	4.0	3.0
15	15.5	13.5	9.5	8.0	7.0	3.5	3.0	2.0	1.5	1.5	4.5	4.0
16	16.0	15.5	10.5	9.5	8.0	7.0	2.5	1.5	1.5	0.5	6.0	4.5
17	16.0	15.5	11.0	10.5	7.5	5.5	3.5	2.0	1.5	0.5	6.0	5.5
18	16.5	15.5	12.5	11.0	5.5	1.0	3.5	2.5	1.5	1.0	6.0	5.0
19	16.5	16.0	12.5	12.0	1.0	0.5	3.5	2.5	1.5	1.0	5.0	4.0
20	17.0	16.0	12.0	11.0	3.0	1.0	2.5	2.5	2.0	0.5	6.5	4.5
21	17.0	16.5	11.0	5.5	3.5	1.0	2.5	2.0	2.0	1.0	8.5	5.5
22	18.0	17.0	5.5	3.0	1.5	1.0	4.0	2.5	2.0	1.5	10.0	7.5
23	18.0	17.5	3.0	1.5	1.5	1.0	4.5	3.0	2.0	1.5	7.5	5.0
24	17.5	17.0	3.0	2.0	3.0	0.5	5.5	4.0	2.0	1.0	5.0	3.5
25	17.5	17.0	3.0	2.5	3.5	3.0	6.0	2.5	1.5	1.0	5.0	4.0
26	18.5	17.0	4.0	3.0	5.5	3.0	2.5	2.0	1.5	0.5	5.0	4.0
27	18.0	17.5	5.0	4.0	5.5	5.0	2.5	2.0	1.5	1.0	7.0	5.0
28	18.0	17.0	5.0	4.5	6.0	5.5	2.5	2.5	2.0	1.0	8.5	6.5
29	18.0	17.0	4.5	4.0	5.5	3.0	2.5	1.5	2.5	1.0	9.0	7.5
30	18.0	17.0	4.5	2.5	3.5	3.0	3.0	2.5	---	---	9.0	8.5
31	18.0	17.0	---	---	4.0	3.5	2.5	2.0	---	---	9.5	8.5
MONTH	20.0	13.0	18.5	1.5	10.0	0.5	6.0	1.5	3.5	0.5	10.0	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	13.5	11.5	15.0	13.0	22.0	18.5	26.5	24.5	---	---
2	10.5	10.0	16.0	13.5	16.0	13.0	21.5	18.5	26.0	24.5	---	---
3	11.0	10.0	16.5	14.5	17.0	13.5	20.5	19.5	25.0	24.5	---	---
4	12.0	11.0	17.0	15.0	16.5	13.5	21.0	20.0	24.5	24.0	---	---
5	12.0	11.0	15.0	10.0	17.5	15.0	20.0	19.5	24.5	23.5	---	---
6	11.5	7.5	---	---	18.5	15.5	20.0	18.5	24.5	23.0	22.5	22.5
7	8.0	6.0	---	---	19.5	17.0	20.5	19.5	23.5	23.0	23.0	22.0
8	6.0	3.0	---	---	19.0	16.0	20.5	19.5	23.5	23.0	---	---
9	4.0	1.0	---	---	18.5	16.5	21.0	19.0	---	---	---	---
10	4.0	1.5	13.0	9.0	16.5	16.5	21.5	19.0	---	---	---	---
11	9.0	3.5	13.0	12.0	17.5	16.0	22.5	20.5	---	---	---	---
12	10.0	8.0	14.0	12.0	17.0	16.5	24.0	21.0	---	---	---	---
13	14.5	9.5	15.0	13.0	18.0	16.5	22.5	21.0	---	---	---	---
14	15.0	12.5	14.0	11.0	20.5	18.0	23.0	21.5	---	---	---	---
15	13.5	12.5	15.5	12.0	20.0	19.0	23.5	22.0	---	---	23.0	22.5
16	13.0	10.5	17.0	15.0	21.0	19.5	23.5	23.0	---	---	22.5	21.5
17	12.5	10.0	16.5	13.5	21.0	19.5	24.5	23.0	---	---	22.0	21.5
18	14.5	11.0	17.0	14.5	21.0	19.5	25.5	23.5	---	---	22.0	21.5
19	14.0	10.5	18.5	14.5	22.0	18.5	24.5	22.5	---	---	21.5	21.5
20	13.5	11.0	18.5	15.5	21.5	18.0	25.0	23.5	---	---	21.5	21.0
21	12.5	9.0	18.0	13.5	18.5	16.5	26.5	24.5	---	---	21.0	20.0
22	11.5	10.5	17.5	13.0	17.0	16.5	27.0	25.0	---	---	20.0	19.5
23	11.5	10.0	18.0	12.5	17.0	12.5	28.5	25.5	---	---	19.5	19.0
24	12.0	11.5	18.0	11.0	13.0	12.5	27.5	26.0	---	---	19.5	19.0
25	12.5	11.5	16.5	11.5	13.5	13.0	26.5	26.0	---	---	21.0	19.5
26	13.0	11.0	17.0	10.5	16.5	13.5	26.0	25.5	---	---	21.0	20.5
27	12.5	11.5	16.0	12.0	20.0	15.5	26.0	25.5	---	---	21.0	20.5
28	12.5	11.5	15.5	11.0	20.5	18.0	25.5	25.0	---	---	20.5	19.5
29	13.0	10.0	16.5	12.0	20.5	18.5	25.5	24.5	---	---	19.5	19.0
30	13.0	11.0	14.5	11.0	20.0	18.5	25.0	24.5	---	---	19.0	13.5
31	---	---	13.5	12.5	---	---	25.5	24.5	---	---	---	---
MONTH	15.0	1.0	18.5	9.0	22.0	12.5	28.5	18.5	---	---	---	---
YEAR	28.5	0.5										

04212960 CONNEAUT CREEK NEAR OHIO-PENNSYLVANIA STATE LINE, OHIO

LOCATION.--Lat 41°54'14", long 80°31'45", in T.13 N., R.1 W., Ashtabula County, at Furnace Road Bridge west of Ohio-Pennsylvania State line.

DRAINAGE AREA.--151 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1969 to June 1972 (discontinued).

REMARKS.--Samples collected quarterly as part of the Environmental Protection Agency national network. No discharge records available.

CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

DATE	TIME	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL RESI-DUE (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
DEC.									
01...	1200	.6	.01	.36	.24	102	48	150	160
MAR.									
01...	1200	.7	.04	.65	.10	148	56	204	245
JUNE									
07...	1400	.2	.11	.38	.060	158	4	162	230

DATE	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	COLOR (PLAT-INUM-COBALT UNITS)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	OIL-GREASE (SEVER-ITY)
DEC.								
01...	7.4	2.0	.0	12.6	91	15	11000	0
MAR.								
01...	6.9	2.0	16.0	13.4	97	5	3700	0
JUNE								
07...	8.3	23.5	24.0	10.8	125	15	40	0

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
MUSKINGUM RIVER BASIN								
03122850 SUGAR CREEK NEAR ORVILLE (LAT 40°49'07", LONG 81°46'46")								
APR., 1972 26...	1030	.00	.00	.00	.00	.00	.00	.00
MAY 03...	1015	.00	.00	.00	.00	.00	.00	.00
JUNE 06...	1345	.00	.00	.00	.00	.00	.00	.00
JULY 05...	1545	.00	.00	.00	.00	.00	.00	.00
AUG. 02...	1300	.00	.00	.00	.00	.00	.00	.00
SEP. 06...	1345	.00	.00	.00	.00	.00	.00	.00
OCT. 04...	1345	.00	.00	.00	.00	.00	.00	.00
NOV. 08...	1430	.00	.00	.00	.00	.02	.00	.00
HOCKING RIVER BASIN								
03157500 HOCKING RIVER AT ENTERPRISE, AT GAGING STATION (LAT 39°33'54", LONG 82°28'29")								
APR., 1972 17...	1045	.00	.00	.00	.00	.00	.00	.00
MAY 23...	1530	.00	.00	.00	.00	.00	.00	.00
JUNE 13...	1445	.00	.00	.00	.00	.00	.00	.00
JULY 25...	1515	.00	.00	.00	.00	.00	.00	.00
AUG. 24...	1540	.00	.00	.00	.00	.00	.00	.00
SEP. 26...	1330	.00	.00	.00	.00	.00	.00	.00
OCT. 20...	1415	.00	.00	.00	.00	.00	.00	.00
NOV. 27...	1505	.00	.00	.00	.00	.00	.00	.00
RACCOON CREEK BASIN								
03201970 MEADOW RUN AT WELLSTON, AT OUTLET FROM SEWAGE DISPOSAL PLANT (LAT 39°06'45", LONG 82°31'30")								
APR., 1972 20...	--	.00	.00	.00	.00	.00	.00	.00
MAY 22...	1035	.00	.00	.00	.00	.00	.00	.00
JUNE 16...	1345	.00	.00	.00	.00	.00	.00	.00
JULY 31...	1235	.00	.00	.00	.00	.00	.00	.00
AUG. 23...	1440	.00	.00	.00	.00	.00	.00	.00
SEP. 12...	1350	.00	.00	.00	.00	.00	.00	.00
OCT. 24...	1430	.00	.00	.00	.00	.00	.00	.00
NOV. 06...	1015	.00	.00	.00	.00	.00	.00	.00
SCIOTO RIVER BASIN								
03219750 UNNAMED TRIBUTARY TO MILL CREEK NEAR NEW DOVER, AT CULVERT ON WATKINS ROAD 2.1 MILES SOUTH OF NEW DOVER (LAT 40°12'57", LONG 83°18'07")								
APR., 1972 21...	1000	.00	.00	.00	.00	.00	.00	.00
MAY 16...	0900	.00	.00	.00	.00	.00	.00	.00
JUNE 08...	0915	.00	.00	.00	.00	.00	.00	.00
JULY 24...	1015	.00	.00	.00	.00	.00	.00	.00
AUG. 07...	0900	.00	.00	.00	.00	.00	.00	.00
SEP. 19...	0935	.00	.00	.00	.00	.00	.00	.00
OCT. 06...	0900	.00	.00	.00	.00	.00	.00	.00
NOV. 27...	0830	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

MUSKINGUM RIVER BASIN

03122850 SUGAR CREEK NEAR ORVILLE (LAT 40°49'07", LONG 81°46'46")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
26...	.00	.00	.00	.0	.00	.00	.00
MAY							
03...	.00	.00	.00	.0	.00	.00	.00
JUNE							
06...	.00	.00	.00	.0	.00	.00	.00
JULY							
05...	.00	.00	.00	.0	.00	.00	.00
AUG.							
02...	.00	.00	.00	.0	.00	.00	.00
SEP.							
06...	.00	.00	.00	.0	.00	.00	.00
OCT.							
04...	.00	.00	.00	.0	.00	.00	.00
NOV.							
08...	.00	.00	.00	.0	.00	.00	.00

HOCKING RIVER BASIN

03157500 HOCKING RIVER AT ENTERPRISE, AT GAGING STATION (LAT 39°33'54", LONG 82°28'29")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
17...	.00	.00	.00	.0	.00	.00	.00
MAY							
23...	.00	.00	.00	.0	.00	.00	.00
JUNE							
13...	.00	.00	.00	.0	.00	.00	.00
JULY							
25...	.00	.00	.00	.0	.00	.00	.00
AUG.							
24...	.00	.00	.00	.0	.00	.00	.00
SEP.							
26...	.00	.00	.00	.0	.00	.00	.00
OCT.							
20...	.00	.00	.00	.0	.00	.00	.00
NOV.							
27...	.00	.00	.00	.0	.00	.00	.00

RACCOON CREEK BASIN

03201970 MEADOW RUN AT WELLSTON, AT OUTLET FROM SEWAGE DISPOSAL PLANT (LAT 39°06'45", LONG 82°31'30")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
20...	.00	.00	.00	.0	.00	.00	.00
MAY							
22...	.00	.00	.00	.0	.00	.00	.00
JUNE							
16...	.00	.00	.00	.0	.00	.00	.00
JULY							
31...	.00	.00	.00	.0	.00	.00	.00
AUG.							
23...	.00	.00	.00	.0	.00	.00	.00
SEP.							
12...	.00	.00	.00	.0	.00	.00	.00
OCT.							
24...	.00	.00	.00	.0	.00	.00	.00
NOV.							
06...	.00	.00	.00	.0	.00	.00	.00

SCIOTO RIVER BASIN

03219750 UNNAMED TRIBUTARY TO MILL CREEK NEAR NEW DOVER,AT CULVERT ON WATKINS ROAD 2.1 MILES SOUTH OF NEW DOVER (LAT 40°12'57", LONG 83°18'07")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
21...	.00	.00	.00	.0	.00	.00	.00
MAY							
16...	.00	.00	.00	.0	.00	.00	.00
JUNE							
08...	.00	.00	.00	.0	.00	.00	.00
JULY							
24...	.00	.00	.00	.0	.00	.00	.00
AUG.							
07...	.00	.00	.00	.0	.00	.00	.00
SEP.							
19...	.00	.00	.00	.0	.00	.00	.00
OCT.							
06...	.00	.00	.00	.0	.00	.00	.00
NOV.							
27...	.00	.00	.00	.0	.00	.00	.00

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

SCIOTO RIVER BASIN

03222010 SCIOTO RIVER AT COLUMBUS, AT RAW WATER INTAKE TO CITY OF COLUMBUS, DUBLIN ROAD WATER TREATMENT PLANT (LAT 39°58'03", LONG 83°02'06")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
OCT., 1971 24-30	--	.00	.00	.00	.00	.00	.00	.00
NOV. 24-30	--	.00	.00	.00	.00	.00	.00	.06
APR., 1972 26...	0900	.00	.00	.00	.00	.00	.00	.00
MAY 26...	0845	.00	.00	.00	.00	.00	.00	.00
JUNE 16...	0900	.00	.00	.00	.00	.00	.00	.00
JULY 26...	1335	.00	.00	.00	.00	.00	.00	.00
AUG. 28...	1300	.00	.00	.00	.00	.00	.00	.00
SEP. 29...	0820	.00	.00	.00	.00	.00	.00	.00
OCT. 20...	1330	.00	.00	.00	.00	.00	.00	.00
NOV. 22...	1535	.00	.00	.00	.00	.00	.00	.00

03228050 SCIOTO RIVER ABOVE BIG WALNUT CREEK NEAR SHADEVILLE, AT COLUMBUS SOUTHERLY SEWAGE DISPOSAL PLANT (LAT 39°49'03", LONG 83°00'55")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
APR., 1972 21...	1100	.00	.00	.00	.00	.00	.00	.00
MAY 26...	0950	.00	.00	.00	.00	.00	.00	.00
JUNE 15...	0955	.00	.00	.00	.00	.00	.00	.00
JULY 26...	1405	.00	.00	.00	.00	.00	.00	.00
AUG. 28...	1335	.00	.00	.00	.00	.00	.00	.00
SEP. 20...	1430	.00	.00	.00	.00	.00	.00	.00
OCT. 20...	1400	.00	.00	.00	.00	.00	.00	.00
NOV. 22...	1505	.00	.00	.00	.00	.00	.00	.00

LITTLE MIAMI RIVER BASIN

03245100 LITTLE MIAMI RIVER NEAR LOVELAND (LAT 39°14'48", LONG 84°14'42")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
OCT., 1971 01-07	--	.00	.00	.00	.00	.00	.00	.00
NOV. 24-30	--	.00	.00	.00	.00	.00	.00	.00
APR., 1972 18...	1530	.00	.00	.00	.00	.00	.00	.00
MAY 05...	1230	.00	.00	.00	.00	.00	.00	.00
JUNE 14...	1235	.00	.00	.00	.00	.00	.00	.00
JULY 25...	1625	.00	.00	.00	.00	.00	.00	.00
AUG. 23...	1045	.00	.00	.00	.00	.00	.00	.00
SEP. 06...	1025	.00	.00	.00	.00	.00	.00	.00
OCT. 19...	1130	.00	.00	.00	.00	.00	.00	.00
NOV. 01...	1110	.00	.00	.00	.00	.00	.00	.00

GREAT MIAMI RIVER BASIN

03271150 GREAT MIAMI RIVER NEAR DAYTON, AT OUTFLOW FROM DAYTON SEWAGE TREATMENT PLANT (LAT 39°43'14", LONG 84°14'00")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
MAY , 1972 12...	1100	.00	.00	.00	.00	.00	.00	.00
JUNE 08...	0930	.00	.00	.00	.00	.00	.00	.00
JULY 28...	1115	.00	.00	.00	.00	.00	.00	.00
AUG. 09...	1830	.00	.00	.00	.00	.00	.00	.00
SEP. 14...	1830	.00	.00	.00	.00	.00	.00	.00
OCT. 06...	0845	.00	.00	.00	.00	.00	.00	.00
NOV. 02...	0900	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE OHIO RIVER BASIN IN OHIO

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

SCIOTO RIVER BASIN

03222010 SCIOTO RIVER AT COLUMBUS, AT RAW WATER INTAKE TO CITY OF COLUMBUS, DUBLIN ROAD WATER TREATMENT PLANT (LAT 39°58'05", LONG 83°02'06")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT., 1971							
24-30	.00	.00	.00	.0	.00	.00	.00
NOV.							
24-30	.00	.00	.00	.0	.00	.00	.00
APR., 1972							
26...	.00	.00	.00	.0	.00	.00	.00
MAY							
26...	.00	.00	.00	.0	.00	.00	.00
JUNE							
16...	.00	.00	.00	.0	.00	.00	.00
JULY							
26...	.00	.00	.00	.0	.00	.00	.00
AUG.							
28...	.00	.00	.00	.0	.00	.00	.00
SEP.							
29...	.00	.00	.00	.0	.00	.00	.00
OCT.							
20...	.00	.00	.00	.0	.00	.00	.00
NOV.							
22...	.00	.00	.00	.0	.00	.00	.00

03228050 SCIOTO RIVER ABOVE BIG WALNUT CREEK NEAR SHADEVILLE, AT COLUMBUS SOUTHERLY SEWAGE DISPOSAL PLANT (LAT 39°49'03", LONG 83°00'55")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
21...	.00	.00	.00	.0	.00	.00	.00
MAY							
26...	.00	.00	.00	.0	.00	.00	.00
JUNE							
15...	.00	.00	.00	.0	.00	.00	.00
JULY							
26...	.00	.00	.00	.0	.00	.00	.00
AUG.							
28...	.00	.00	.00	.0	.00	.00	.00
SEP.							
20...	.00	.00	.00	.0	.00	.00	.00
OCT.							
20...	.00	.00	.00	.0	.00	.00	.00
NOV.							
22...	.00	.00	.00	.0	.00	.00	.00

LITTLE MIAMI RIVER BASIN

03245100 LITTLE MIAMI RIVER NEAR LOVELAND (LAT 39°14'48", LONG 84°14'42")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT., 1971							
01-07	.00	.00	.00	.0	.00	.00	.00
NOV.							
24-30	.00	.00	.00	.0	.00	.00	.00
APR., 1972							
18...	.00	.00	.00	.0	.00	.00	.00
MAY							
05...	.00	.00	.00	.0	.00	.00	.00
JUNE							
14...	.00	.00	.00	.0	.00	.00	.00
JULY							
25...	.00	.00	.00	.0	.00	.00	.00
AUG.							
23...	.00	.00	.00	.0	.00	.00	.00
SEP.							
06...	.00	.00	.00	.0	.00	.00	.00
OCT.							
19...	.00	.00	.00	.0	.00	.00	.00
NOV.							
01...	.00	.00	.00	.0	.00	.00	.00

GREAT MIAMI RIVER BASIN

03271150 GREAT MIAMI RIVER NEAR DAYTON, AT OUTFLOW FROM DAYTON SEWAGE TREATMENT PLANT (LAT 39°43'14", LONG 84°14'00")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
MAY , 1972							
12...	.00	.00	.00	.0	.00	.00	.00
JUNE							
08...	.00	.00	.00	.0	.00	.00	.00
JULY							
28...	.00	.00	.00	.0	.00	.00	.00
AUG.							
09...	.00	.00	.00	.0	.00	.00	.00
SEP.							
14...	.00	.00	.00	.0	.00	.00	.00
OCT.							
06...	.00	.00	.00	.0	.00	.00	.00
NOV.							
02...	.00	.00	.00	.0	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE OHIO RIVER BASIN IN OHIO

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT McGAW, AT GAGING STATION (LAT 38°38'27", LONG 83°12'57")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
OCT. 19...	1410	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 31...	1015	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT IN BOTTOM DE-POSITS (UG/KG)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)
AUG. 31...	1015	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<1.0

PESTICIDE ANALYSES OF STREAMS IN THE ST. LAWRENCE RIVER BASIN IN OHIO

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE

04192550 MAUMEE RIVER AT NAPOLEON, AT CAMPBELL SOUP COMPANY PLANT (LAT 41°23'15", LONG 84°07'09")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
APR., 1972 24...	1415	.00	.00	.00	.00	.00	.00	.00
MAY 10...	0820	.00	.00	.00	.00	.00	.00	.00
JUNE 08...	1245	.00	.00	.00	.00	.00	.00	.00
JULY 31...	1350	.00	.00	.00	.00	.00	.00	.00
AUG. 25...	1245	.00	.00	.00	.00	.00	.00	.00
SEP. 20...	1300	.00	.00	.00	.00	.00	.00	.00
OCT. 12...	1150	.00	.00	.00	.00	.00	.00	.00
NOV. 29...	1050	.00	.00	.00	.00	.00	.00	.00

04182785 BRUSH CREEK NEAR BELMORE (LAT 41°08'11", LONG 83°58'37")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
APR., 1972 25...	1015	.00	.00	.00	.00	.00	.00	.00
MAY 10...	0725	.00	.00	.00	.00	.00	.00	.00
JUNE 08...	1515	.00	.00	.00	.00	.00	.00	.00
JULY 24...	1500	.00	.00	.00	.00	.00	.00	.00
AUG. 25...	1335	.00	.00	.00	.00	.00	.00	.00
SEP. 19...	1455	.00	.00	.00	.00	.00	.00	.00
OCT. 11...	1510	.00	.00	.00	.00	.00	.00	.00
NOV. 28...	1630	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE OHIO RIVER BASIN IN OHIO

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

DATE	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	DI-AZINON (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
UPPER TWIN CREEK BASIN									
03237280 UPPER TWIN CREEK AT McGAW, AT GAGING STATION (LAT 38°38'37", LONG 83°12'57")									
OCT. 19...	.00	.0	.00	.00	.00	.00	.00	.00	.00
AUG. 31...	.00	.0	.00	.00	.00	.00	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE ST. LAWRENCE RIVER BASIN IN OHIO

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
STREAMS TRIBUTARY TO LAKE ERIE							
04192550 MAUMEE RIVER AT NAPOLEON, AT CAMPBELL SOUP COMPANY PLANT (LAT 41°23'15", LONG 84°07'09")							
APR., 1972 24...	.00	.00	.00	.0	.00	.00	.00
MAY 10...	.00	.00	.00	.0	.00	.00	.00
JUNE 08...	.00	.00	.00	.0	.00	.00	.00
JULY 31...	.00	.00	.00	.0	.00	.00	.00
AUG. 25...	.00	.00	.00	.0	.00	.00	.00
SEP. 20...	.00	.00	.00	.0	.00	.00	.00
OCT. 12...	.00	.00	.00	.0	.00	.00	.00
NOV. 29...	.00	.00	.00	.0	.00	.00	.00
04192785 BRUSH CREEK NEAR BELMORE (LAT 41°08'11", LONG 83°58'37")							
APR., 1972 26...	.00	.00	.00	.0	.00	.00	.00
MAY 10...	.00	.00	.00	.0	.00	.00	.00
JUNE 08...	.00	.00	.00	.0	.00	.00	.00
JULY 24...	.00	.00	.00	.0	.00	.00	.00
AUG. 25...	.00	.00	.00	.0	.00	.00	.00
SEP. 19...	.00	.00	.00	.0	.00	.00	.00
OCT. 11...	.00	.00	.00	.0	.00	.00	.00
NOV. 28...	.00	.00	.00	.0	.00	.00	.00

PESTICIDE ANALYSES OF STREAMS IN THE ST. LAWRENCE RIVER BASIN IN OHIO

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE

04193490 MAUMEE RIVER NEAR WATERVILLE, AT RAW WATER INTAKE TO BOWLING GREEN WATER TREATMENT PLANT (LAT 41°28'34", LONG 83°44'20")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
OCT., 1971								
05-11	--	.00	.00	.00	.00	.00	.00	.00
NOV.								
03-09	--	.00	.00	.00	.00	.00	.00	.00
APR., 1972								
21...	1205	.00	.00	.00	.00	.00	.00	.00
MAY								
10...	0855	.00	.00	.00	.00	.00	.00	.00
JUNE								
08...	1515	.00	.00	.00	.00	.00	.00	.00
JULY								
21...	1115	.00	.00	.00	.00	.00	.00	.00
AUG.								
17...	1400	.00	.00	.00	.00	.00	.00	.00
SEP.								
20...	1500	.00	.00	.00	.00	.00	.00	.00
OCT.								
12...	1345	.00	.00	.00	.00	.00	.00	.00
NOV.								
29...	1320	.00	.00	.00	.00	.00	.00	.00

04198011 SOUTH CREEK NEAR CLYDE (LAT 41°19'21", LONG 83°01'16")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
APR., 1972								
24...	1245	.00	.00	.00	.00	.00	.00	.00
MAY								
18...	1200	.00	.00	.00	.00	.00	.00	.00
JUNE								
06...	0830	.00	.00	.00	.00	.00	.00	.00
JULY								
19...	1130	.00	.00	.00	.00	.00	.00	.00
AUG.								
10...	1345	.00	.00	.00	.00	.00	.00	.00
SEP.								
25...	1315	.00	.00	.00	.00	.00	.00	.00
OCT.								
05...	1235	.00	.00	.00	.00	.00	.00	.00
NOV.								
24...	1130	.00	.00	.00	.00	.00	.00	.00

04198013 BUCK CREEK NEAR CLYDE (LAT 41°19'43", LONG 82°59'03")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
APR., 1972								
24...	1230	.00	.00	.00	.00	.00	.00	.00
MAY								
18...	1145	.00	.00	.00	.00	.00	.00	.00
JUNE								
06...	0820	.00	.00	.00	.00	.00	.00	.00
JULY								
19...	1120	.00	.00	.00	.00	.00	.00	.00
AUG.								
10...	1330	.00	.00	.00	.00	.00	.00	.00
SEP.								
25...	1300	.00	.00	.00	.00	.00	.00	.00
OCT.								
05...	1245	.00	.00	.00	.00	.00	.00	.00
NOV.								
24...	1145	.00	.01	.00	.00	.01	.00	.00

04199500 VERMILION RIVER NEAR VERMILION, AT GAGING STATION (LAT 41°22'55", LONG 82°19'01")

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
APR., 1972								
26...	1200	.00	.00	.00	.00	.00	.00	.00
MAY								
25...	1325	.00	.00	.00	.00	.00	.00	.00
JUNE								
06...	1530	.00	.00	.00	.00	.00	.00	.00
JULY								
18...	1545	.00	.00	.00	.00	.00	.00	.00
AUG.								
09...	1230	.00	.00	.00	.00	.00	.00	.00
SEP.								
12...	1400	.00	.00	.00	.00	.00	.00	.00
OCT.								
03...	1815	.00	.00	.00	.00	.00	.00	.00
NOV.								
21...	1630	.00	.00	.00	.00	<.01	.00	.00

PESTICIDE ANALYSES, OCTOBER 1971 TO NOVEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE

04193490 MAUMEE RIVER NEAR WATERVILLE, AT RAW WATER INTAKE TO BLOWLING GREEN WATER TREATMENT PLANT (LAT 41°28'34", LONG 83°44'20")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
OCT., 1971							
05-11	.00	.00	.00	.0	.00	.00	.00
NOV.							
03-09	.00	.00	.00	.0	.00	.00	.00
APR., 1972							
21...	.00	.00	.00	.0	.00	.00	.00
MAY							
10...	.00	.00	.00	.0	.00	.00	.00
JUNE							
08...	.00	.00	.00	.0	.00	.00	.00
JULY							
21...	.00	.00	.00	.0	.00	.00	.00
AUG.							
17...	.00	.00	.00	.0	.00	.00	.00
SEP.							
20...	.00	.00	.00	.0	.00	.00	.00
OCT.							
12...	.00	.00	.00	.0	.00	.00	.00
NOV.							
29...	.00	.00	.00	.0	.00	.00	.00

04198011 SOUTH CREEK NEAR CLYDE (LAT 41°19'21", LONG 83°01'16")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
24...	.00	.00	.00	.0	.00	.00	.00
MAY							
18...	.00	.00	.00	.0	.00	.00	.00
JUNE							
06...	.00	.00	.00	.0	.00	.00	.00
JULY							
19...	.00	.00	.00	.0	.00	.00	.00
AUG.							
10...	.00	.00	.00	.0	.00	.00	.00
SEP.							
25...	.00	.00	.00	.0	.00	.00	.00
OCT.							
05...	.00	.00	.00	.0	.00	.00	.00
NOV.							
24...	.00	.00	.00	.0	.00	.00	.00

04198013 BUCK CREEK NEAR CLYDE (LAT 41°19'43", LONG 82°59'03")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
24...	.00	.00	.00	.0	.00	.00	.00
MAY							
18...	.00	.00	.00	.0	.00	.00	.00
JUNE							
06...	.00	.00	.00	.0	.00	.00	.00
JULY							
19...	.00	.00	.00	.0	.00	.00	.00
AUG.							
10...	.00	.00	.00	.0	.00	.00	.00
SEP.							
25...	.00	.00	.00	.0	.00	.00	.00
OCT.							
05...	.00	.00	.00	.0	.00	.00	.00
NOV.							
24...	.00	.00	.00	.0	.00	.00	.00

04199500 VERMILION RIVER NEAR VERMILION, AT GAGING STATION (LAT 41°22'55", LONG 82°19'01")

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	METH-OXY-CHLOR (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)
APR., 1972							
26...	.00	.00	.00	.0	.00	.00	.00
MAY							
25...	.00	.00	.00	.0	.00	.00	.00
JUNE							
06...	.00	.00	.00	.0	.00	.00	.00
JULY							
18...	.00	.00	.00	.0	.00	.00	.00
AUG.							
09...	.00	.00	.00	.0	.00	.00	.00
SEP.							
12...	.00	.00	.00	--	.00	.00	.00
OCT.							
03...	.00	.00	.00	.0	.00	.00	.00
NOV.							
21...	.00	.00	.00	.0	.00	.00	.00

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
BEAVER RIVER BASIN									
03086500 - MAHONING RIVER AT ALLIANCE, OHIO (LAT 40 55 58 LONG 081 05 41)									
NOV., 1971									
19...	1215	22	--	--	--	--	--	--	--
JAN., 1972									
25...	1350	118	--	--	130	31	--	3.4	15
MAR.									
17...	1045	649	--	--	87	19	--	2.8	13
MAY									
19...	1025	31	--	--	--	--	--	--	--
JUNE									
13...	1340	18	--	--	170	30	--	3.1	14
AUG.									
11...	1355	7.9	182	4	190	36	.5	3.1	14
03089500 - MILL CREEK NEAR BERLIN CENTER, OHIO (LAT 41 00 01 LONG 080 58 07)									
JULY, 1972									
31...	1030	--	--	--	230	22	--	.40	1.8
SEP.									
07...	1020	.57	160	0	310	19	.3	.00	.0
03090500 - MAHONING R BL BERLIN DAM NR BERLIN CENTER (LAT 41 02 54 LONG 081 00 05)									
NOV., 1971									
19...	1435	22	--	--	--	--	--	--	--
JAN., 1972									
21...	1440	24	--	--	160	39	--	2.7	12
MAR.									
21...	1220	1190	--	--	120	36	--	2.8	12
MAY									
18...	1345	224	--	--	--	--	--	--	--
JUNE									
13...	1040	147	--	--	110	24	--	1.6	6.9
JULY									
11...	1230	1.3	--	--	--	--	--	--	--
AUG.									
11...	1120	251	--	--	--	--	--	--	--
03091500 - MAHONING RIVER AT PRICETOWN, OHIO (LAT 41 07 53 LONG 080 58 17)									
NOV., 1971									
23...	1150	88	--	--	--	--	--	--	--
JAN., 1972									
19...	1450	62	--	--	120	31	--	.80	3.6
MAR.									
20...	1430	1140	--	--	130	34	--	2.0	8.9
MAY									
16...	1410	337	--	--	--	--	--	--	--
JUNE									
22...	1050	149	--	--	110	28	--	1.6	7.0
AUG.									
10...	1515	298	--	--	--	--	--	--	--
03092000 - KALE CREEK NEAR PRICETOWN, OHIO (LAT 41 08 23 LONG 080 59 43)									
NOV., 1971									
16...	1430	.41	--	--	--	--	--	--	--
JAN., 1972									
21...	1150	3.3	--	--	170	32	--	1.3	5.8
MAR.									
16...	0930	61	--	--	67	22	--	1.3	5.7
MAY									
17...	1000	9.2	--	--	--	--	--	--	--
JUNE									
22...	1155	2.3	--	--	160	38	--	.90	4.1
AUG.									
10...	1050	.47	226	0	190	23	.3	.10	.5
03092099 - HINKLEY CREEK AT CHARLESTOWN, OHIO (LAT 41 09 16 LONG 081 08 51)									
JULY, 1972									
28...	1130	--	--	--	74	81	--	.30	1.3
SEP.									
08...	0920	.23	200	0	49	120	.2	.20	1.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

BEAVER RIVER BASIN

03086500 - MAHONING RIVER AT ALLIANCE, OHIO (LAT 40 55 58 LONG 081 05 41)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
19...	--	--	--	--	--	712	--	10.0
JAN., 1972								
25...	--	--	--	230	--	535	7.4	3.0
MAR.								
17...	--	--	--	150	--	358	6.8	5.0
MAY								
19...	--	--	--	--	--	631	--	18.0
JUNE								
13...	--	--	--	300	--	685	8.3	18.5
AUG.								
11...	.33	1.0	330	360	200	778	8.4	22.0

03089500 - MILL CREEK NEAR BERLIN CENTER, OHIO (LAT 41 00 01 LONG 080 58 07)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JULY, 1972								
31...	--	--	--	410	--	828	8.1	19.5
SEP.								
07...	.006	.02	632	420	290	862	8.1	21.5

03090500 - MAHONING R BL BERLIN DAM NR BERLIN CENTER (LAT 41 02 54 LONG 081 00 05)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
19...	--	--	--	--	--	616	--	9.0
JAN., 1972								
21...	--	--	--	260	--	638	7.3	2.5
MAR.								
21...	--	--	--	200	--	514	7.8	4.5
MAY								
18...	--	--	--	--	--	418	--	14.0
JUNE								
13...	--	--	--	180	--	433	7.9	14.5
JULY								
11...	--	--	--	--	--	484	--	19.5
AUG.								
11...	--	--	--	--	--	423	--	19.5

03091500 - MAHONING RIVER AT PRICETOWN, OHIO (LAT 41 07 53 LONG 080 58 17)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
23...	--	--	--	--	--	493	--	7.0
JAN., 1972								
19...	--	--	--	200	--	509	7.2	2.0
MAR.								
20...	--	--	--	210	--	516	7.0	4.5
MAY								
16...	--	--	--	--	--	425	--	16.0
JUNE								
22...	--	--	--	170	--	429	7.5	19.5
AUG.								
10...	--	--	--	--	--	418	--	22.5

03092000 - KALE CREEK NEAR PRICETOWN, OHIO (LAT 41 08 23 LONG 080 59 43)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
16...	--	--	--	--	--	1020	--	9.0
JAN., 1972								
21...	--	--	--	220	--	549	7.3	.5
MAR.								
16...	--	--	--	100	--	282	7.4	3.0
MAY								
17...	--	--	--	--	--	422	--	16.0
JUNE								
22...	--	--	--	280	--	665	7.7	16.0
AUG.								
10...	.44	1.4	498	320	130	752	7.8	16.5

03092099 - HINKLEY CREEK AT CHARLESTOWN, OHIO (LAT 41 09 16 LONG 081 08 51)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JULY, 1972								
28...	--	--	--	240	--	683	8.0	19.5
SEP.								
08...	.017	.05	464	240	76	800	8.2	17.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
BEAVER RIVER BASIN--Continued									
03092460 - W B MAHONING R BL MJ KIRWAN DAM AT WAYLAND (LAT 41 09 25 LONG 081 04 19)									
NOV., 1971									
16...	1230	19	--	--	--	--	--	--	--
JAN., 1972									
20...	1600	17	--	--	66	28	--	.70	3.1
MAR.									
16...	1205	20	--	--	68	29	--	.90	4.1
JUNE									
15...	--	--	--	--	56	34	--	1.1	5.0
15...	1135	102	--	--	56	34	--	1.1	5.0
AUG.									
09...	1435	36	--	--	--	--	--	--	--
03092500 - W B MAHONING R NR NEWTON FALLS, OHIO (LAT 41 10 18 LONG 081 01 16)									
NOV., 1971									
16...	1350	22	--	--	--	--	--	--	--
JAN., 1972									
21...	1000	28	--	--	71	37	--	.60	2.6
MAR.									
12...	1040	--	--	--	63	24	--	.93	4.1
16...	1040	62	--	--	63	24	--	.90	4.1
MAY									
17...	1145	51	--	--	--	--	--	--	--
JUNE									
15...	1010	102	--	--	59	25	--	1.0	4.2
AUG.									
10...	1250	42	--	--	--	--	--	--	--
03093000 - EAGLE CREEK AT PHALANX STATION, OHIO (LAT 41 15 40 LONG 080 57 16)									
DEC., 1971									
08...	1310	1750	--	--	37	13	--	1.0	4.6
MAY , 1972									
12...	1010	115	--	--	--	--	--	--	--
JUNE									
14...	1305	41	--	--	51	17	--	1.0	4.3
JULY									
31...	1310	20	--	--	--	--	--	--	--
SEP.									
08...	1135	9.2	190	0	54	20	.2	.60	3.4
19...	1330	588	--	--	--	--	--	--	--
03095500 - MOSQUITO C BL MOSQUITO C DAM NR CORTLAND O (LAT 41 17 59 LONG 080 45 31)									
NOV., 1971									
24...	1255	13	--	--	--	--	--	--	--
JAN., 1972									
19...	0940	15	--	--	47	20	--	1.0	4.4
MAR.									
15...	1330	22	--	--	50	29	--	1.4	6.2
MAY									
11...	1520	21	--	--	--	--	--	--	--
JULY									
13...	1450	97	--	--	43	17	--	1.0	4.4
AUG.									
08...	1000	41	53	0	41	18	.2	.50	2.2
SEP.									
14...	1420	47	--	--	--	--	--	--	--
03098000 - MAHONING RIVER AT YOUNGSTOWN, OHIO (LAT 41 06 40 LONG 080 40 23)									
NOV., 1971									
17...	1240	234	--	--	--	--	--	--	--
JAN., 1972									
18...	0850	256	--	--	120	64	--	3.8	17
MAR.									
14...	1435	5120	--	--	--	--	--	--	--
APR.									
17...	1235	7060	--	--	63	21	--	1.1	5.0
MAY									
15...	1605	951	--	--	--	--	--	--	--
JUNE									
14...	0925	414	--	--	110	43	--	4.7	21
AUG.									
07...	1415	468	--	--	--	--	--	--	--
03099500 - MAHONING RIVER AT LOWELLVILLE, OHIO (LAT 41 02 12 LONG 080 32 11)									
APR., 1972									
18...	1145	4620	--	--	83	30	--	1.7	7.6
JUNE									
14...	1240	585	--	--	130	54	--	4.4	19

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
BEAVER RIVER BASIN--Continued								
03092460 - W B MAHONING R BL MJ KIRWAN DAM AT WAYLAND (LAT 41 09 25 LONG 081 04 19)								
NOV., 1971								
16...	--	--	--	--	--	385	--	10.0
JAN., 1972								
20...	--	--	--	150	--	376	7.5	1.0
MAR.								
16...	--	--	--	150	--	381	7.2	3.0
JUNE								
15...	--	--	--	120	--	327	8.0	--
15...	--	--	--	120	--	327	8.0	16.0
AUG.								
09...	--	--	--	--	--	329	--	20.5
03092500 - W B MAHONING R NR NEWTON FALLS, OHIO (LAT 41 10 18 LONG 081 01 16)								
NOV., 1971								
16...	--	--	--	--	--	427	--	10.0
JAN., 1972								
21...	--	--	--	160	--	383	7.6	.5
MAR.								
12...	--	--	--	130	--	317	7.0	3.0
16...	--	--	--	130	--	317	7.0	3.0
MAY								
17...	--	--	--	--	--	334	--	13.0
JUNE								
15...	--	--	--	130	--	330	7.3	15.5
AUG.								
10...	--	--	--	--	--	344	--	15.5
03093000 - EAGLE CREEK AT PHALANX STATION, OHIO (LAT 41 15 40 LONG 080 57 16)								
DEC., 1971								
08...	--	--	--	62	--	178	6.8	6.0
MAY , 1972								
12...	--	--	--	--	--	275	--	13.5
JUNE								
14...	--	--	--	180	--	397	8.3	19.5
JULY								
31...	--	--	--	--	--	420	--	20.5
SEP.								
08...	.12	.38	270	200	44	447	7.8	18.0
19...	--	--	--	--	--	192	--	18.0
03095500 - MOSQUITO C BL MOSQUITO C DAM NR CORTLAND O (LAT 41 17 59 LONG 080 45 31)								
NOV., 1971								
24...	--	--	--	--	--	243	--	4.0
JAN., 1972								
19...	--	--	--	98	--	268	7.3	2.0
MAR.								
15...	--	--	--	110	--	318	8.1	4.0
MAY								
11...	--	--	--	--	--	242	--	15.0
JULY								
13...	--	--	--	86	--	232	8.0	20.5
AUG.								
08...	.048	.15	146	90	46	238	7.5	22.5
SEP.								
14...	--	--	--	--	--	251	--	20.5
03098000 - MAHONING RIVER AT YOUNGSTOWN, OHIO (LAT 41 06 40 LONG 080 40 23)								
NOV., 1971								
17...	--	--	--	--	--	596	--	24.0
JAN., 1972								
18...	--	--	--	210	--	608	6.7	8.5
MAR.								
14...	--	--	--	--	--	421	--	6.5
APR.								
17...	--	--	--	110	--	304	6.6	13.0
MAY								
15...	--	--	--	--	--	453	--	21.0
JUNE								
14...	--	--	--	180	--	523	7.7	28.5
AUG.								
07...	--	--	--	--	--	498	--	29.0
03099500 - MAHONING RIVER AT LOWELLVILLE, OHIO (LAT 41 02 12 LONG 080 32 11)								
APR., 1972								
18...	--	--	--	150	--	400	7.0	14.5
JUNE								
14...	--	--	--	200	--	594	7.1	30.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE OHIO RIVER BASIN

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

BEAVER RIVER BASIN--Continued

03102950 - PYMATUNING CREEK AT KINSMAN, OHIO (LAT 41 26 34 LONG 080 35 18)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
24...	1110	53	--	--	--	--	--	--	--
JAN., 1972									
17...	1505	54	--	--	61	19	--	1.4	6.1
MAR.									
15...	1200	645	--	--	34	15	--	1.6	7.1
MAY									
11...	1220	148	--	--	--	--	--	--	--
JULY									
12...	1345	86	--	--	20	11	--	.40	1.7
SEP.									
14...	1120	8.6	166	0	25	16	.2	.30	1.5

LITTLE BEAVER CREEK BASIN

03109100 - M F L BEAVER C NR ROGERS OH (LAT 40 43 22 LONG 080 38 03)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
25...	0900	--	--	--	180	42	--	.90	4.0
SEP.									
06...	1230	29	53	0	150	41	.4	.20	1.1

03109200 - W F L BEAVER C AT WEST POINT OH (LAT 40 42 38 LONG 080 41 49)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
25...	0800	--	--	--	190	19	--	.50	2.3
SEP.									
06...	1040	10	98	0	240	29	.3	.20	1.0

03109400 - N F L BEAVER C NR NEGLEY OH (LAT 40 46 30 LONG 080 32 36)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
25...	1015	--	--	--	270	57	--	1.1	4.8
SEP.									
06...	1355	35	176	5	300	50	.3	.40	1.7

03109500 - L BEAVER C NR E LIVERPOOL OH (LAT 40 40 33 LONG 080 32 27)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
26...	1145	56	--	--	--	--	--	--	--
NOV.									
24...	1100	112	--	--	--	--	--	--	--
JAN., 1972									
25...	1045	665	--	--	140	35	--	1.7	7.4
25...	1050	665	--	--	--	--	--	--	--
FEB.									
24...	1335	578	--	--	--	--	--	--	--
MAR.									
27...	1200	800	--	--	--	--	--	--	--
27...	1210	800	--	--	--	--	--	--	--
APR.									
16...	1440	3580	--	--	100	20	--	1.6	7.2
25...	1325	1020	--	--	--	--	--	--	--
MAY									
25...	1135	205	--	--	--	--	--	--	--
JUNE									
26...	1215	1490	--	--	--	--	--	--	--
26...	1315	1490	--	--	130	21	--	2.4	10
JULY									
25...	1120	188	--	--	--	--	--	--	--
AUG.									
25...	1210	91	138	0	250	43	.3	.40	1.7
SEP.									
06...	1535	88	--	--	--	--	--	--	--
19...	1430	1220	--	--	--	--	--	--	--
28...	1145	182	--	--	--	--	--	--	--

YELLOW CREEK BASIN

03110000 - YELLOW CREEK NEAR HAMMONDSVILLE, OHIO (LAT 40 32 16 LONG 080 43 31)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
24...	1400	14	--	--	--	--	--	--	--
JAN., 1972									
25...	1340	269	--	--	120	13	--	.90	3.8
MAR.									
24...	1310	364	--	--	--	--	--	--	--
24...	1315	364	--	--	--	--	--	--	--
APR.									
16...	1825	642	--	--	97	9.7	--	.90	4.0
16...	1830	646	--	--	--	--	--	--	--
MAY									
25...	1410	68	--	--	--	--	--	--	--
JULY									
25...	1320	28	--	--	250	22	--	.40	1.6
SEP.									
07...	0805	8.2	24	0	320	33	.2	.00	.0
19...	1245	59	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

BEAVER RIVER BASIN--Continued

03102950 - PYMATUNING CREEK AT KINSMAN, OHIO (LAT 41 26 34 LONG 080 35 18)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV., 1971								
24...	--	--	--	--	--	356	--	.5
JAN., 1972								
17...	--	--	--	120	--	303	6.7	.0
MAR.								
15...	--	--	--	70	--	192	7.4	1.5
MAY								
11...	--	--	--	--	--	226	--	12.5
JULY								
12...	--	--	--	100	--	225	8.2	22.5
SEP.								
14...	.022	.07	220	160	24	341	8.1	18.0

LITTLE BEAVER CREEK BASIN

03109100 - M F L BEAVER C NR ROGERS OH (LAT 40 43 22 LONG 080 38 03)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JULY, 1972								
25...	--	--	--	300	--	662	7.9	23.0
SEP.								
06...	.003	.01	340	200	160	509	8.1	18.0

03109200 - W F L BEAVER C AT WEST POINT OH (LAT 40 42 38 LONG 080 41 49)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JULY, 1972								
25...	--	--	--	270	--	581	7.6	23.5
SEP.								
06...	.017	.05	466	340	260	697	7.9	18.0

03109400 - N F L BEAVER C NR NEGLEY OH (LAT 40 46 30 LONG 080 32 36)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JULY, 1972								
25...	--	--	--	440	--	895	8.3	22.0
SEP.								
06...	.17	.54	690	480	330	954	8.4	19.5

03109500 - L BEAVER C NR E LIVERPOOL OH (LAT 40 40 33 LONG 080 32 27)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT., 1971								
26...	--	--	--	--	--	852	--	15.0
NOV.								
24...	--	--	--	--	--	722	--	1.5
JAN., 1972								
25...	--	--	--	250	--	559	7.9	3.0
25...	--	--	--	--	--	--	--	3.0
FEB.								
24...	--	--	--	--	--	582	--	.0
MAR.								
27...	--	--	--	--	--	--	--	5.0
27...	--	--	--	--	--	555	--	5.0
APR.								
16...	--	--	--	160	--	375	7.2	13.0
25...	--	--	--	--	--	504	--	13.0
MAY								
25...	--	--	--	--	--	663	--	17.0
JUNE								
26...	--	--	--	--	--	--	--	20.0
26...	--	--	--	210	--	442	7.7	20.0
JULY								
25...	--	--	--	--	--	692	--	24.0
AUG.								
25...	.091	.28	550	380	270	799	7.6	22.0
SEP.								
06...	--	--	--	--	--	780	--	20.0
19...	--	--	--	--	--	--	--	20.5
28...	--	--	--	--	--	729	--	16.0

YELLOW CREEK BASIN

03110000 - YELLOW CREEK NEAR HAMMONDSVILLE, OHIO (LAT 40 32 16 LONG 080 43 31)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV., 1971								
24...	--	--	--	--	--	757	--	1.5
JAN., 1972								
25...	--	--	--	140	--	354	7.6	3.5
MAR.								
24...	--	--	--	--	--	--	--	4.0
24...	--	--	--	--	--	317	--	4.0
APR.								
16...	--	--	--	120	--	297	7.3	13.0
16...	--	--	--	--	--	--	--	13.0
MAY								
25...	--	--	--	--	--	498	--	19.0
JULY								
25...	--	--	--	240	--	606	7.3	26.0
SEP.								
07...	.000	.00	556	390	280	766	7.4	17.5
19...	--	--	--	--	--	--	--	21.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
YELLOW CREEK BASIN--Continued									
03110600 - N F YELLOW C AT HAMMONDSVILLE OH (LAT 40 33 27 LONG 080 42 20)									
JULY, 1972									
25...	1450	--	--	--	180	18	--	.20	.9
SEP.									
07...	0905	3.7	53	0	280	36	.3	.00	.0
CROSS CREEK BASIN									
03111000 - CROSS CREEK AT MINGO JUNCTION, OHIO (LAT 40 19 03 LONG 080 37 45)									
SEP., 1972									
07...	1110	13	87	0	920	23	.5	.00	.0
SHORT CREEK BASIN									
03111500 - SHORT CREEK NEAR DILLONVALE, OHIO (LAT 40 11 36 LONG 080 44 04)									
NOV., 1971									
23...	1015	21	--	--	--	--	--	--	--
JAN., 1972									
26...	1025	94	--	--	610	50	--	.70	3.1
26...	1030	94	--	--	--	--	--	--	--
MAR.									
23...	1000	302	--	--	--	--	--	--	--
23...	1010	302	--	--	--	--	--	--	--
APR.									
14...	1045	565	--	--	--	--	--	--	--
14...	1050	565	--	--	610	21	--	1.0	4.3
16...	1310	403	--	--	--	--	--	--	--
16...	1315	403	--	--	--	--	--	--	--
MAY									
12...	1020	127	--	--	--	--	--	--	--
JUNE									
19...	1135	54	--	--	--	--	--	--	--
19...	1145	54	--	--	--	--	--	--	--
JULY									
28...	1000	44	--	--	1400	95	--	.30	1.5
28...	1035	44	--	--	--	--	--	--	--
AUG.									
16...	1125	26	--	--	--	--	--	--	--
SEP.									
07...	1515	25	--	--	--	--	--	--	--
19...	1115	159	--	--	--	--	--	--	--
WHEELING CREEK BASIN									
03111550 - WHEELING CREEK AT BROOKSIDE, OHIO (LAT 40 04 05 LONG 080 46 49)									
SEP., 1972									
07...	1310	22	120	0	1500	21	.9	.20	.8
CAPTINA CREEK BASIN									
03114000 - CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39 54 31 LONG 080 55 27)									
NOV., 1971									
15...	1125	17	--	--	--	--	--	--	--
JAN., 1972									
12...	1135	259	--	--	--	--	--	--	--
12...	1140	259	--	--	48	8.7	--	.60	2.7
MAR.									
08...	1110	716	--	--	--	--	--	--	--
08...	1120	716	--	--	43	16	--	1.2	5.2
APR.									
16...	1550	1530	--	--	--	--	--	--	--
MAY									
09...	1235	107	--	--	--	--	--	--	--
JUNE									
13...	1105	11	--	--	80	18	--	.20	1.1
AUG.									
21...	1120	26	--	--	--	--	--	--	--
SEP.									
19...	0915	1.2	--	--	--	--	--	--	--
SUNFISH CREEK BASIN									
03114250 - SUNFISH CREEK AT CAMERON, OHIO (LAT 39 46 00 LONG 080 56 09)									
JULY, 1972									
27...	1035	--	--	--	45	17	--	.30	1.3
SEP.									
05...	1105	10	182	0	46	78	.1	.20	.9
LITTLE MUSKINGUM RIVER BASIN									
03115300 - L MUSKINGUM R NR RINARD MILLS OH (LAT 39 35 25 LONG 081 07 21)									
JULY, 1972									
27...	--	--	--	--	33	23	--	.20	.9
AUG.									
11...	1515	16	128	0	30	22	.1	.03	.1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
YELLOW CREEK BASIN--Continued								
03110600 - N F YELLOW C AT HAMMONDSVILLE OH (LAT 40 33 27 LONG 080 42 20)								
JULY, 1972								
25...	--	--	--	180	--	506	8.0	23.0
SEP.								
07...	.008	.02	516	260	220	745	7.9	16.0
CROSS CREEK BASIN								
03111000 - CROSS CREEK AT MINGO JUNCTION, OHIO (LAT 40 19 03 LONG 080 37 45)								
SEP., 1972								
07...	.002	.01	1470	1000	930	1620	8.0	18.5
SHORT CREEK BASIN								
03111500 - SHORT CREEK NEAR DILLONVALE, OHIO (LAT 40 11 36 LONG 080 44 04)								
NOV., 1971								
23...	--	--	--	--	--	2750	--	.0
JAN., 1972								
26...	--	--	--	870	--	1710	8.0	.0
26...	--	--	--	--	--	--	--	.0
MAR.								
23...	--	--	--	--	--	1620	--	4.5
23...	--	--	--	--	--	--	--	4.5
APR.								
14...	--	--	--	--	--	--	--	11.5
14...	--	--	--	720	--	1340	8.0	11.5
16...	--	--	--	--	--	--	--	14.0
16...	--	--	--	--	--	1560	--	14.0
MAY								
12...	--	--	--	--	--	2110	--	13.0
JUNE								
19...	--	--	--	--	--	2460	--	22.0
19...	--	--	--	--	--	--	--	22.0
JULY								
28...	--	--	--	1300	--	2580	7.8	20.0
28...	--	--	--	--	--	--	--	20.0
AUG.								
16...	--	--	--	--	--	2640	--	22.0
SEP.								
07...	--	--	--	--	--	2710	--	21.5
19...	--	--	--	--	--	--	--	19.5
WHEELING CREEK BASIN								
03111550 - WHEELING CREEK AT BROOKSIDE, OHIO (LAT 40 04 05 LONG 080 46 49)								
SEP., 1972								
07...	.017	.05	2460	1000	900	2740	8.2	22.5
CAPTINA CREEK BASIN								
03114000 - CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39 54 31 LONG 080 55 27)								
NOV., 1971								
15...	--	--	--	--	--	473	--	10.0
JAN., 1972								
12...	--	--	--	--	--	--	--	3.0
12...	--	--	--	160	--	318	8.3	3.0
MAR.								
08...	--	--	--	--	--	--	--	3.5
08...	--	--	--	120	--	267	8.0	3.5
APR.								
16...	--	--	--	--	--	--	--	--
MAY								
09...	--	--	--	--	--	363	--	13.0
JUNE								
13...	--	--	--	210	--	476	7.9	17.0
AUG.								
21...	--	--	--	--	--	439	--	24.0
SEP.								
19...	--	--	--	--	--	--		21.5
SUNFISH CREEK BASIN								
03114250 - SUNFISH CREEK AT CAMERON, OHIO (LAT 39 46 00 LONG 080 56 09)								
JULY, 1972								
27...	--	--	--	170	--	363	7.6	24.0
SEP.								
05...	.056	.17	340	190	41	579	8.0	19.0
LITTLE MUSKINGUM RIVER BASIN								
03115300 - L MUSKINGUM R NR RINARD MILLS OH (LAT 39 36 25 LONG 081 07 21)								
JULY, 1972								
27...	--	--	--	150	--	337	8.4	25.0
AUG.								
11...	.076	.23	192	130	25	322	8.2	22.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

LITTLE MUSKINGUM RIVER BASIN--Continued

03115400 - LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO (LAT 39 33 47 LONG 081 12 14)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
15...	1530	19	--	--	--	--	--	--	--
JAN., 1972									
12...	1425	442	--	--	--	--	--	--	--
12...	1445	442	--	--	35	15	--	.40	1.9
MAR.									
08...	1430	1020	--	--	35	12	--	.60	2.7
APR.									
16...	1800	835	--	--	--	--	--	--	--
MAY									
09...	1550	236	--	--	--	--	--	--	--
JUNE									
13...	1415	12	--	--	--	--	--	--	--
27...	1500	--	--	--	33	25	--	.36	1.6
JULY									
27...	1500	25	--	--	33	25	--	.40	1.8
AUG.									
09...	1150	35	--	--	--	--	--	--	--
21...	1450	72	--	--	--	--	--	--	--
SEP.									
05...	1320	46	--	--	--	--	--	--	--
18...	1900	4.1	--	--	--	--	--	--	--

DUCK CREEK BASIN

03115650 - EAST FORK DUCK CREEK AT LOWER SALEM, OHIO (LAT 39 34 26 LONG 081 23 25)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
27...	1020	--	--	--	520	6.1	--	.20	1.6
SEP.									
05...	1650	31	2	0	620	7.5	.7	.50	2.2

03115700 - WEST FORK DUCK CREEK AT DEXTER CITY, OHIO (LAT 39 39 45 LONG 081 28 25)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
27...	--	--	--	--	180	44	--	.80	3.8
SEP.									
06...	1445	6.7	162	0	300	36	.3	.60	2.7

03115800 - DUCK CREEK AT STANLEYVILLE, OHIO (LAT 39 28 14 LONG 081 24 41)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
27...	0915	--	--	--	470	18	--	.30	1.2
SEP.									
05...	1830	93	16	0	470	21	.4	.50	2.1

MUSKINGUM RIVER BASIN

03115900 - TUSCARAWAS RIVER NEAR EAST LIBERTY, OHIO (LAT 41 00 25 LONG 081 29 31)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
07...	1115	19	216	6	79	30	.2	.40	1.5

03116000 - TUSCARAWAS RIVER AT CLINTON, OHIO (LAT 40 55 46 LONG 081 37 58)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
18...	1020	50	--	--	--	--	--	--	--
JAN., 1972									
19...	1045	86	--	--	190	4300	--	3.1	14
MAR.									
20...	1010	240	--	--	110	--	--	--	--
MAY									
17...	1320	134	--	--	86	3800	--	1.2	5.2
AUG.									
09...	1030	70	138	0	49	5900	.2	1.4	6.1
SEP.									
07...	1015	64	--	--	--	--	--	--	--
14...	1500	490	--	--	--	--	--	--	--

03116100 - LITTLE CHIPPEWA CREEK NR SMITHVILLE OHIO (LAT 40 53 39 LONG 081 48 46)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
06...	1200	5.0	214	6	120	45	.6	5.7	25

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
LITTLE MUSKINGUM RIVER BASIN--Continued								
03115400 - LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO (LAT 39 33 47 LONG 081 12 14)								
NOV., 1971								
15...	--	--	--	--	--	628	--	9.0
JAN., 1972								
12...	--	--	--	--	--	--	--	5.5
12...	--	--	--	100	--	255	8.0	5.5
MAR.								
08...	--	--	--	100	--	240	7.8	5.5
APR.								
16...	--	--	--	--	--	--	--	--
MAY								
09...	--	--	--	--	--	306	--	15.0
JUNE								
13...	--	--	--	--	--	397	--	18.0
27...	--	--	--	160	--	371	8.4	25.0
JULY								
27...	--	--	--	160	--	371	8.4	25.0
AUG.								
09...	--	--	--	--	--	293	--	21.5
21...	--	--	--	--	--	331	--	23.0
SEP.								
05...	--	--	--	--	--	421	--	19.0
18...	--	--	--	--	--	--	--	21.5
DUCK CREEK BASIN								
03115650 - EAST FORK DUCK CREEK AT LOWER SALEM, OHIO (LAT 39 34 26 LONG 081 23 25)								
JULY, 1972								
27...	--	--	--	580	--	1010	7.1	23.5
SEP.								
05...	.006	.02	956	620	620	1080	4.6	17.0
03115700 - WEST FORK DUCK CREEK AT DEXTER CITY, OHIO (LAT 39 39 45 LONG 081 28 25)								
JULY, 1972								
27...	--	--	--	340	--	750	7.6	24.0
SEP.								
06...	.017	.05	618	440	310	879	7.8	18.0
03115800 - DUCK CREEK AT STANLEYVILLE, OHIO (LAT 39 28 14 LONG 081 24 41)								
JULY, 1972								
27...	--	--	--	500	--	930	6.8	24.5
SEP.								
05...	.000	.00	746	500	490	943	6.6	18.0
MUSKINGUM RIVER BASIN								
03115900 - TUSCARAWAS RIVER NEAR EAST LIBERTY, OHIO (LAT 41 00 25 LONG 081 29 31)								
SEP., 1972								
07...	.022	.07	360	280	92	573	8.3	18.5
03116000 - TUSCARAWAS RIVER AT CLINTON, OHIO (LAT 40 55 40 LONG 081 37 58)								
NOV., 1971								
18...	--	--	--	--	--	17600	--	18.0
JAN., 1972								
19...	--	--	--	3300	--	13200	7.0	12.5
MAR.								
20...	--	--	--	1700	--	6010	7.7	8.0
MAY								
17...	--	--	--	2600	--	10900	7.4	24.0
AUG.								
09...	.18	.57	10100	4300	4200	15200	7.3	20.5
SEP.								
07...	--	--	--	--	--	16300	--	22.0
14...	--	--	--	--	--	2580	--	.1
03116100 - LITTLE CHIPPEWA CREEK NR SMITHVILLE OHIO (LAT 40 53 39 LONG 081 48 46)								
SEP., 1972								
06...	4.6	14	476	260	84	730	7.5	17.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
MUSKINGUM RIVER BASIN--Continued									
03116200 - CHIPPEWA CREEK AT EASTON, OHIO (LAT 40 56 47 LONG 081 44 35)									
NOV., 1971									
18...	1400	12	--	--	--	--	--	--	--
JAN., 1972									
19...	1420	68	--	--	140	140	--	3.6	16
19...	1425	68	--	--	--	--	--	--	--
MAR.									
20...	1330	309	--	--	100	98	--	4.3	19
MAY									
17...	1125	84	--	--	--	--	--	--	--
JULY									
12...	1150	58	--	--	140	96	--	4.3	19
AUG.									
01...	1215	22	--	--	--	--	--	--	--
SEP.									
06...	1345	17	240	0	160	160	.3	3.1	14
06...	1415	17	--	--	--	--	--	--	--
14...	1115	855	--	--	--	--	--	--	--
14...	1215	855	--	--	--	--	--	--	--
20...	1030	179	--	--	--	--	--	--	--
03117000 - TUSCARAWAS RIVER AT MASSILLON, OHIO (LAT 40 46 13 LONG 081 31 27)									
NOV., 1971									
19...	1010	129	--	--	--	--	--	--	--
JAN., 1972									
17...	1005	165	--	--	120	1600	--	4.3	19
MAR.									
21...	--	810	--	--	98	530	--	3.7	16
MAY									
08...	1000	292	--	--	--	--	--	--	--
JUNE									
12...	1050	152	--	--	89	2400	--	2.2	9.6
AUG.									
14...	1105	12	78	0	140	2400	1.2	2.7	12
03117500 - SANDY CREEK AT WAYNESBURG, OHIO (LAT 40 40 21 LONG 081 15 36)									
OCT., 1971									
04...	1315	30	--	--	--	--	--	--	--
NOV.									
17...	1135	25	--	--	--	--	--	--	--
30...	1300	131	--	--	--	--	--	--	--
DEC.									
08...	1015	406	--	--	--	--	--	--	--
08...	1230	406	--	--	81	25	--	3.4	15
21...	1320	177	--	--	--	--	--	--	--
JAN., 1972									
14...	0930	268	--	--	--	--	--	--	--
14...	0935	268	--	--	--	--	--	--	--
MAR.									
15...	0940	1600	--	--	--	--	--	--	--
15...	0950	1600	--	--	50	13	--	2.8	12
APR.									
21...	0935	1150	--	--	--	--	--	--	--
21...	0945	1150	--	--	--	--	--	--	--
MAY									
15...	1220	215	--	--	--	--	--	--	--
JULY									
10...	1030	237	--	--	59	16	--	.80	3.7
SEP.									
11...	1445	35	152	4	100	19	.2	.60	2.5
19...	1645	234	--	--	--	--	--	--	--
03118000 - M B NIMISHILLEN C AT CANTON OH (LAT 40 50 29 LONG 081 21 14)									
NOV., 1971									
19...	1435	3.8	--	--	--	--	--	--	--
JAN., 1972									
17...	1410	9.7	--	--	170	52	--	3.9	17
MAR.									
13...	1115	372	--	--	97	55	--	4.8	21
21...	1410	56	--	--	--	--	--	--	--
MAY									
03...	1205	234	--	--	--	--	--	--	--
08...	1345	34	--	--	--	--	--	--	--
JUNE									
12...	1425	13	--	--	--	--	--	--	--
JULY									
20...	0940	80	--	--	100	27	--	3.8	17
AUG.									
14...	1430	13	246	0	140	47	.2	.70	3.1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

03116200 - CHIPPEWA CREEK AT EASTON, OHIO (LAT 40 56 47 LONG 081 44 35)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
18...	--	--	--	--	--	1620	--	12.0
JAN., 1972								
19...	--	--	--	280	--	991	7.1	2.0
19...	--	--	--	--	--	--	--	2.0
MAR.								
20...	--	--	--	190	--	662	7.7	5.0
MAY								
17...	--	--	--	--	--	737	--	16.0
JULY								
12...	--	--	--	280	--	856	8.3	20.0
AUG.								
01...	--	--	--	--	--	1210	--	24.0
SEP.								
06...	.48	1.5	696	320	120	1110	7.2	20.5
06...	--	--	--	--	--	--	--	20.5
14...	--	--	--	--	--	--	--	20.0
14...	--	--	--	--	--	331	--	20.0
20...	--	--	--	--	--	--	--	18.5

03117000 - TUSCARAWAS RIVER AT MASSILLON, OHIO (LAT 40 46 13 LONG 081 31 27)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
19...	--	--	--	--	--	8980	--	13.0
JAN., 1972								
17...	--	--	--	1500	--	5300	8.1	.5
MAR.								
21...	--	--	--	560	--	2020	7.1	7.0
MAY								
08...	--	--	--	--	--	5450	--	13.0
JUNE								
12...	--	--	--	1850	--	7630	7.3	17.0
AUG.								
14...	.19	.58	4300	1700	1600	7050	7.9	23.0

03117500 - SANDY CREEK AT WAYNESBURG, OHIO (LAT 40 40 21 LONG 081 15 36)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971								
04...	--	--	--	--	--	--	--	20.0
NOV.								
17...	--	--	--	--	--	639	--	7.5
30...	--	--	--	--	--	--	--	4.0
DEC.								
08...	--	--	--	--	--	--	--	6.0
08...	--	--	--	150	--	378	7.1	6.0
21...	--	--	--	--	--	--	--	--
JAN., 1972								
14...	--	--	--	--	--	353	--	2.0
14...	--	--	--	--	--	--	--	2.0
MAR.								
15...	--	--	--	--	--	--	--	4.0
15...	--	--	--	82	--	215	7.2	4.0
APR.								
21...	--	--	--	--	--	229	--	9.5
21...	--	--	--	--	--	--	--	9.5
MAY								
15...	--	--	--	--	--	362	--	15.0
JULY								
10...	--	--	--	160	--	373	8.0	13.0
SEP.								
11...	.045	.14	298	240	110	490	8.4	18.0
19...	--	--	--	--	--	--	--	21.0

03118000 - M B NIMISHILLEN C AT CANTON OH (LAT 40 50 29 LONG 081 21 14)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
19...	--	--	--	--	--	605	--	10.0
JAN., 1972								
17...	--	--	--	360	--	762	8.1	.5
MAR.								
13...	--	--	--	200	--	525	7.3	6.0
21...	--	--	--	--	--	638	--	8.5
MAY								
03...	--	--	--	--	--	584	--	15.0
08...	--	--	--	--	--	658	--	13.0
JUNE								
12...	--	--	--	--	--	745	--	17.0
JULY								
20...	--	--	--	250	--	537	7.6	24.0
AUG.								
14...	.020	.06	516	370	170	764	8.1	23.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
MUSKINGUM RIVER BASIN--Continued									
03118500 - NIMISHILLEN CREEK AT NORTH INDUSTRY, OHIO (LAT 40 44 03 LONG 081 21 08)									
NOV., 1971									
17...	1430	68	--	--	--	--	--	--	--
JAN., 1972									
14...	1420	152	--	--	180	220	--	3.5	16
MAR.									
15...	1420	730	--	--	130	73	--	5.9	26
SEP.									
11...	1055	97	257	0	220	120	1.6	6.0	26
03119700 - CONOTTON CREEK AT JEWETT, OHIO (LAT 40 21 59 LONG 081 00 13)									
JULY, 1972									
28...	1315	--	--	--	520	63	--	1.1	4.8
SEP.									
08...	0910	.67	200	0	550	200	.3	1.4	6.1
03119900 - CONOTTON CREEK AT LEESVILLE, OHIO (LAT 40 26 44 LONG 081 11 49)									
JULY, 1972									
25...	1310	--	--	--	140	32	--	.70	3.1
SEP.									
08...	1030	3.6	146	0	99	46	.2	1.1	5.0
03120500 - MCGUIRE C BL LEESVILLE DAM NR LEESVILLE OH (LAT 40 28 13 LONG 081 11 48)									
DEC., 1971									
02...	1030	183	--	--	27	6.5	--	.50	2.2
JAN., 1972									
20...	1415	28	--	--	--	--	--	--	--
MAR.									
16...	1400	122	--	--	29	6.9	--	.90	4.0
MAY									
18...	1350	52	--	--	--	--	--	--	--
JULY									
13...	1250	36	--	--	30	7.1	--	.90	4.2
SEP.									
12...	1015	1.4	59	0	23	7.1	.1	.90	3.9
03121500 - INDIAN FORK NEAR NEW CUMBERLAND, OHIO (LAT 40 31 31 LONG 081 17 18)									
NOV., 1971									
10...	0945	2.0	--	--	--	--	--	--	--
JAN., 1972									
20...	1035	4.8	--	--	40	28	--	.60	2.8
MAR.									
16...	0930	125	--	--	43	31	--	1.1	4.9
MAY									
18...	1100	57	--	--	--	--	--	--	--
JULY									
13...	1500	82	--	--	42	25	--	.90	4.0
SEP.									
12...	1240	4.7	77	0	30	26	.2	1.3	5.6
03122500 - TUSCARAWAS R BL DOVER DAM NR DOVER OH (LAT 40 31 47 LONG 081 25 48)									
NOV., 1971									
12...	1335	296	--	--	--	--	--	--	--
JAN., 1972									
11...	1435	1530	--	--	130	340	--	2.7	12
MAR.									
07...	1040	2100	--	--	--	--	--	--	--
APR.									
26...	1000	4300	--	--	110	130	--	2.0	9.0
MAY									
02...	1325	1520	--	--	--	--	--	--	--
JULY									
26...	1345	1670	--	--	150	620	--	2.5	11
SEP.									
26...	1050	679	160	0	140	670	.4	2.9	13

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MUSKINGUM RIVER BASIN--Continued								
03118500 - NIMISHILLEN CREEK AT NORTH INDUSTRY, OHIO (LAT 40 44 03 LONG 081 21 08)								
NOV., 1971 17...	--	--	--	--	--	1350	--	15.0
JAN., 1972 14...	--	--	--	390	--	1330	6.7	6.0
MAR. 15...	--	--	--	250	--	682	8.0	5.5
SEP. 11...	1.9	5.9	776	450	240	1170	7.8	17.0
03119700 - CONOTTON CREEK AT JEWETT, OHIO (LAT 40 21 59 LONG 081 00 13)								
JULY, 1972 28...	--	--	--	640	--	1270	7.8	23.0
SEP. 08...	.60	1.9	1280	700	540	1770	7.5	16.0
03119900 - CONOTTON CREEK AT LEESVILLE, OHIO (LAT 40 26 44 LONG 081 11 49)								
JULY, 1972 25...	--	--	--	260	--	597	7.8	24.0
SEP. 08...	.092	.28	350	220	100	542	8.2	18.0
03120500 - MCGUIRE C BL LEESVILLE DAM NR LEESVILLE OH (LAT 40 28 13 LONG 081 11 48)								
DEC., 1971 02...	--	--	--	70	--	154	7.2	6.5
JAN., 1972 20...	--	--	--	--	--	174	--	3.0
MAR. 16...	--	--	--	76	--	179	7.9	4.0
MAY 18...	--	--	--	--	--	165	--	16.0
JULY 13...	--	--	--	71	--	177	7.8	17.0
SEP. 12...	.017	.05	106	73	24	170	7.3	16.0
03121500 - INDIAN FORK NEAR NEW CUMBERLAND, OHIO (LAT 40 31 31 LONG 081 17 18)								
NOV., 1971 10...	--	--	--	--	--	266	--	10.0
JAN., 1972 20...	--	--	--	100	--	282	7.4	2.0
MAR. 16...	--	--	--	100	--	287	7.9	4.0
MAY 18...	--	--	--	--	--	243	--	15.0
JULY 13...	--	--	--	92	--	262	7.5	21.0
SEP. 12...	.094	.29	146	95	32	265	7.2	17.0
03122500 - TUSCARAWAS R BL DOVER DAM NR DOVER OH (LAT 40 31 47 LONG 081 25 48)								
NOV., 1971 12...	--	--	--	--	--	4270	--	8.5
JAN., 1972 11...	--	--	--	420	--	1490	7.1	4.5
MAR. 07...	--	--	--	--	--	2820	--	3.5
APR. 26...	--	--	--	260	--	780	7.8	11.0
MAY 02...	--	--	--	--	--	1540	--	14.0
JULY 26...	--	--	--	640	--	2430	7.6	22.0
SEP. 26...	.54	1.6	1430	700	570	2410	8.0	19.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

03123000 - SUGAR C AB BEACH CITY DAM AT BEACH CITY OH (LAT 40 39 24 LONG 081 34 37)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
22...	1410	17	--	--	--	--	--	--	--
JAN., 1972									
24...	1015	115	--	--	86	40	--	3.2	14
24...	1020	117	--	--	--	--	--	--	--
MAR.									
02...	1400	614	--	--	--	--	--	--	--
22...	1445	350	--	--	--	--	--	--	--
22...	1500	350	--	--	--	--	--	--	--
APR.									
21...	1320	1430	--	--	51	12	--	3.5	15
21...	1330	1430	--	--	--	--	--	--	--
MAY									
03...	1130	346	--	--	--	--	--	--	--
19...	1410	98	--	--	--	--	--	--	--
JULY									
05...	1430	134	--	--	--	--	--	--	--
14...	1135	66	--	--	--	--	--	--	--
17...	1300	1000	--	--	--	--	--	--	--
17...	1410	1040	--	--	41	12	--	4.8	21
SEP.									
15...	1115	320	--	--	--	--	--	--	--
15...	1205	317	112	0	62	36	.1	2.8	12
19...	1900	73	--	--	--	--	--	--	--

03124000 - SUGAR C BL BEACH CITY DAM NR BEACH CITY OH (LAT 40 38 08 LONG 081 33 11)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
22...	1145	31	--	--	--	--	--	--	--
JAN., 1972									
24...	1310	240	--	--	160	27	--	3.0	13
MAR.									
22...	1150	565	--	--	160	19	--	4.3	19
MAY									
19...	1120	211	--	--	--	--	--	--	--
JULY									
14...	1450	108	--	--	160	27	--	3.6	16
SEP.									
15...	1520	456	98	0	130	39	.2	2.2	9.6

03124500 - SUGAR CREEK AT STRASBURG, OHIO (LAT 40 35 15 LONG 081 31 24)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
22...	0950	34	--	--	--	--	--	--	--
JAN., 1972									
24...	1500	255	--	--	190	27	--	2.8	12
MAR.									
22...	1010	595	--	--	--	--	--	--	--
APR.									
25...	0945	745	--	--	140	16	--	3.5	15
JUNE									
15...	1350	154	--	--	280	30	--	3.6	16
AUG.									
15...	1020	37	94	0	220	37	.2	.10	.6

03125000 - HOME CREEK NEAR NEW PHILADELPHIA, OHIO (LAT 40 28 06 LONG 081 24 10)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
01...	1330	--	157	0	460	88	.6	.70	3.2
NOV.									
12...	1130	.08	--	--	--	--	--	--	--
DEC.									
30...	1240	30	--	--	120	15	--	1.2	5.3
JAN., 1972									
11...	1250	1.1	--	--	--	--	--	--	--
MAR.									
07...	1330	4.7	--	--	170	15	--	4.2	18
MAY									
02...	1040	1.2	--	--	--	--	--	--	--
JULY									
13...	--	--	--	--	420	18	--	1.1	4.9
13...	1010	.12	--	--	420	18	--	1.1	4.9
28...	1445	.02	--	--	--	--	--	--	--
SEP.									
12...	1520	.01	116	0	430	60	.5	1.6	7.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

03123000 - SUGAR C AB BEACH CITY DAM AT BEACH CITY OH (LAT 40 39 24 LONG 081 34 37)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO_4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
22...	--	--	--	--	--	585	--	3.0
JAN., 1972								
24...	--	--	--	220	--	503	7.5	3.5
24...	--	--	--	--	--	--	--	3.5
MAR.								
02...	--	--	--	--	--	409	--	6.5
22...	--	--	--	--	--	413	--	8.0
22...	--	--	--	--	--	--	--	8.0
APR.								
21...	--	--	--	110	--	272	7.3	10.0
21...	--	--	--	--	--	--	--	12.0
MAY								
03...	--	--	--	--	--	--	--	16.5
19...	--	--	--	--	--	468	--	17.0
JULY								
05...	--	--	--	--	--	--	--	18.0
14...	--	--	--	--	--	516	--	22.0
17...	--	--	--	--	--	--	--	23.0
17...	--	--	--	110	--	260	7.2	23.0
SEP.								
15...	--	--	--	--	--	--	--	18.0
15...	.62	1.9	254	170	78	429	8.2	18.0
19...	--	--	--	--	--	--	--	21.0

03124000 - SUGAR C BL BEACH CITY DAM NR BEACH CITY OH (LAT 40 38 08 LONG 081 33 11)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO_4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
22...	--	--	--	--	--	793	--	1.5
JAN., 1972								
24...	--	--	--	280	--	584	8.0	4.0
MAR.								
22...	--	--	--	230	--	502	7.6	8.0
MAY								
19...	--	--	--	--	--	613	--	17.0
JULY								
14...	--	--	--	280	--	595	7.5	23.0
SEP.								
15...	.32	.97	356	230	150	549	7.3	18.0

03124500 - SUGAR CREEK AT STRASBURG, OHIO (LAT 40 35 15 LONG 081 31 24)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO_4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971								
22...	--	--	--	--	--	780	--	2.0
JAN., 1972								
24...	--	--	--	290	--	614	7.8	4.5
MAR.								
22...	--	--	--	--	--	471	--	7.5
APR.								
25...	--	--	--	210	--	471	7.4	10.5
JUNE								
15...	--	--	--	360	--	751	7.7	23.0
AUG.								
15...	.058	.18	448	300	220	675	8.2	22.0

03125000 - HOME CREEK NEAR NEW PHILADELPHIA, OHIO (LAT 40 28 06 LONG 081 24 10)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO_4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT., 1971								
01...	.050	.14	980	490	360	1330	7.8	24.5
NOV.								
12...	--	--	--	--	--	1270	--	8.5
DEC.								
30...	--	--	--	160	--	372	6.7	8.5
JAN., 1972								
11...	--	--	--	--	--	620	--	4.5
MAR.								
07...	--	--	--	200	--	464	6.6	6.5
MAY								
02...	--	--	--	--	--	689	--	16.0
JULY								
13...	--	--	--	470	--	944	7.3	--
13...	--	--	--	470	--	944	7.3	21.0
28...	--	--	--	--	--	1140	--	25.5
SEP.								
12...	.056	.17	860	530	430	1140	7.8	17.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
MUSKINGUM RIVER BASIN--Continued									
03126000 - STILLWATER CREEK AT PIEDMONT, OHIO (LAT 40 11 41 LONG 081 12 56)									
NOV., 1971 09...	1000	15	--	--	--	--	--	--	--
JAN., 1972 10...	1135	265	--	--	370	14	--	.40	1.8
MAR. 05...	1120	197	--	--	390	12	--	.60	2.4
MAY 16...	1145	122	--	--	--	--	--	--	--
JULY 11...	1140	62	--	--	440	12	--	.40	1.7
SEP. 13...	1000	12	176	0	590	22	.3	.80	3.4
03127000 - STILLWATER CREEK AT TIPPECANOE, OHIO (LAT 40 16 13 LONG 081 17 26)									
NOV., 1971 09...	1340	24	--	--	--	--	--	--	--
JAN., 1972 10...	1435	388	--	--	260	11	--	.50	2.2
MAR. 06...	1420	432	--	--	--	--	--	--	--
APR. 26...	1450	852	--	--	280	8.2	--	.40	1.9
MAY 16...	1420	272	--	--	--	--	--	--	--
JULY 11...	1425	154	--	--	370	12	--	.70	3.2
SEP. 13...	1410	21	146	8	440	16	.2	.80	3.7
03127500 - STILLWATER CREEK AT UHRICHSVILLE, OHIO (LAT 40 23 10 LONG 081 20 50)									
NOV., 1971 12...	1005	29	--	--	--	--	--	--	--
JAN., 1972 11...	1030	552	--	--	220	23	--	.60	2.4
MAR. 14...	1510	1080	--	--	160	23	--	.90	4.1
MAY 11...	1445	416	--	--	--	--	--	--	--
JUNE 15...	1050	235	--	--	400	100	--	.90	4.0
AUG. 15...	1525	29	142	0	450	130	.3	.80	3.4
03128500 - L STILLWATER C BL TAPPAN DAM AT TAPPAN OH (LAT 40 21 25 LONG 081 13 49)									
NOV., 1971 10...	1400	1.8	--	--	--	--	--	--	--
JAN., 1972 26...	1435	60	--	--	260	10	--	.50	2.2
MAR. 23...	1415	422	--	--	250	9.9	--	.60	2.5
MAY 12...	1405	65	--	--	--	--	--	--	--
JUNE 19...	1540	12	--	--	240	9.0	--	.80	3.8
03129100 - WHITE EYES CREEK NEAR FRESNO, OHIO (LAT 40 18 17 LONG 081 45 01)									
JUNE, 1972 07...	1130	--	--	--	96	12	--	.70	3.3
SEP. 05...	0950	3.8	114	0	100	16	.2	.50	2.1
03130000 - BLACK F BL CHAS MILL DAM NR MIFFLIN OH (LAT 40 44 16 LONG 082 21 48)									
NOV., 1971 16...	1000	21	--	--	69	30	--	.40	2.0
JAN., 1972 26...	1055	165	--	--	--	--	--	--	--
MAR. 21...	1050	844	--	--	67	23	--	4.6	20
MAY 09...	1630	374	--	--	--	--	--	--	--
JULY 17...	1340	212	--	--	62	19	--	1.4	6.1
SEP. 14...	1405	9.7	151	0	56	18	.1	1.1	4.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
MUSKINGUM RIVER BASIN--Continued								
03126000 - STILLWATER CREEK AT PIEDMONT, OHIO (LAT 40 11 41 LONG 081 12 56)								
NOV., 1971								
09...	--	--	--	--	--	1170	--	9.0
JAN., 1972								
10...	--	--	--	470	--	871	8.0	5.0
MAR.								
05...	--	--	--	510	--	933	7.9	3.0
MAY								
16...	--	--	--	--	--	970	--	15.0
JULY								
11...	--	--	--	570	--	997	7.6	19.0
SEP.								
13...	.087	.27	1030	740	600	1280	7.6	16.0
03127000 - STILLWATER CREEK AT TIPPECANOE, OHIO (LAT 40 16 13 LONG 081 17 26)								
NOV., 1971								
09...	--	--	--	--	--	1030	--	5.0
JAN., 1972								
10...	--	--	--	350	--	678	7.8	4.5
MAR.								
06...	--	--	--	--	--	753	--	2.5
APR.								
26...	--	--	--	360	--	694	7.8	14.0
MAY								
16...	--	--	--	--	--	740	--	14.0
JULY								
11...	--	--	--	490	--	893	8.1	21.0
SEP.								
13...	.085	.26	800	570	440	1020	8.4	17.0
03127500 - STILLWATER CREEK AT UHRICHSVILLE, OHIO (LAT 40 23 10 LONG 081 20 50)								
NOV., 1971								
12...	--	--	--	--	--	1150	--	5.5
JAN., 1972								
11...	--	--	--	310	--	619	8.0	3.5
MAR.								
14...	--	--	--	220	--	501	7.6	8.0
MAY								
11...	--	--	--	--	--	700	--	14.0
JUNE								
15...	--	--	--	470	--	1140	7.5	21.0
AUG.								
15...	.036	.11	948	570	450	1360	7.5	22.0
03128500 - L STILLWATER C BL TAPPAN DAM AT TAPPAN OH (LAT 40 21 25 LONG 081 13 49)								
NOV., 1971								
10...	--	--	--	--	--	650	--	9.5
JAN., 1972								
26...	--	--	--	360	--	690	7.6	2.5
MAR.								
23...	--	--	--	340	--	658	7.2	4.5
MAY								
12...	--	--	--	--	--	621	--	14.0
JUNE								
19...	--	--	--	330	--	645	8.0	20.0
03129100 - WHITE EYES CREEK NEAR FRESNO, OHIO (LAT 40 18 17 LONG 081 45 01)								
JUNE, 1972								
07...	--	--	--	190	--	379	7.7	17.0
SEP.								
05...	.011	.03	248	180	86	415	8.2	14.5
03130000 - BLACK F BL CHAS MILL DAM NR MIFFLIN OH (LAT 40 44 16 LONG 082 21 48)								
NOV., 1971								
16...	--	--	--	220	--	491	7.6	9.0
JAN., 1972								
26...	--	--	--	--	--	579	--	2.0
MAR.								
21...	--	--	--	180	--	411	6.9	7.0
MAY								
09...	--	--	--	--	--	385	--	14.0
JULY								
17...	--	--	--	190	--	403	8.3	23.5
SEP.								
14...	.15	.47	248	190	66	401	7.5	22.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
MUSKINGUM RIVER BASIN--Continued									
03130500 - TOUBY RUN AT MANSFIELD, OHIO (LAT 40 45 53 LONG 082 32 43)									
NOV., 1971 30...	1400	3.9	--	--	--	--	--	--	--
JAN., 1972 18...	1315	1.1	--	--	200	360	--	2.7	12
MAR. 20...	1510	4.4	--	--	78	160	--	2.2	9.6
MAY 10...	0920	7.8	--	--	--	--	--	--	--
JULY 28...	1245	.62	--	--	110	210	--	.50	2.0
SEP. 25...	1255	.93	238	0	88	130	.3	2.0	8.8
03132000 - CLEAR FORK AT BUTLER, OHIO (LAT 40 35 37 LONG 082 25 20)									
NOV., 1971 15...	1705	26	--	--	35	16	--	.50	2.1
JAN., 1972 25...	1530	102	--	--	--	--	--	--	--
MAR. 20...	1215	220	--	--	--	--	--	--	--
APR. 21...	1135	1670	--	--	39	16	--	1.4	6.4
MAY 08...	1430	142	--	--	--	--	--	--	--
JULY 14...	1040	220	--	--	32	13	--	1.6	7.1
SEP. 13...	1450	43	244	0	35	16	.1	.90	4.2
03133500 - CLEAR F BL PL HILL DAM NR PERRYSVILLE OH (LAT 40 37 13 LONG 082 19 28)									
NOV., 1971 15...	1405	40	--	--	30	14	--	.30	1.5
MAR., 1972 17...	1210	474	--	--	32	18	--	1.8	7.7
MAY 09...	1330	486	--	--	--	--	--	--	--
JULY 14...	1300	332	--	--	--	--	--	--	--
18...	1250	1040	--	--	22	9.1	--	1.3	5.8
SEP. 13...	1200	53	162	0	27	13	.1	.80	3.5
03134300 - MUDDY FORK NEAR ROWSBURG, OHIO (LAT 40 50 10 LONG 082 08 16)									
JUNE, 1972 07...	1455	--	--	--	94	66	--	1.6	6.9
SEP. 05...	1520	7.0	232	0	91	62	.2	1.0	4.2
03135000 - LAKE F BL MOHICANVILLE DAM NR MOHICANVILLE (LAT 40 43 24 LONG 082 09 18)									
NOV., 1971 15...	1140	15	--	--	82	57	--	2.6	12
JAN., 1972 26...	1350	94	--	--	--	--	--	--	--
MAR. 21...	1410	389	--	--	--	--	--	--	--
APR. 21...	1500	1400	--	--	37	11	--	2.2	9.9
MAY 15...	1305	317	--	--	81	27	--	2.0	8.6
AUG. 07...	1130	43	--	--	--	--	--	--	--
SEP. 21...	1400	146	173	0	73	27	.2	1.3	5.7

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MUSKINGUM RIVER BASIN--Continued								
03130500 - TOUBY RUN AT MANSFIELD, OHIO (LAT 40 45 53 LONG 082 32 43)								
NOV., 1971 30...	--	--	--	--	--	1360	--	4.5
JAN., 1972 18...	--	--	--	520	--	1810	7.7	.0
MAR. 20...	--	--	--	290	--	903	8.0	7.0
MAY 10...	--	--	--	--	--	515	--	7.5
JULY 28...	--	--	--	400	--	1180	8.3	19.0
SEP. 25...	.35	1.1	546	310	110	896	8.0	17.0
03132000 - CLEAR FORK AT BUTLER, OHIO (LAT 40 35 37 LONG 082 25 20)								
NOV., 1971 15...	--	--	--	240	--	455	8.4	11.0
JAN., 1972 25...	--	--	--	--	--	420	--	3.0
MAR. 20...	--	--	--	--	--	368	--	6.0
APR. 21...	--	--	--	130	--	294	8.1	13.0
MAY 08...	--	--	--	--	--	407	--	15.0
JULY 14...	--	--	--	170	--	347	8.4	19.5
SEP. 13...	.11	.34	278	240	40	456	8.2	20.5
03133500 - CLEAR F BL PL HILL DAM NR PERRYSVILLE OH (LAT 40 37 13 LONG 082 19 28)								
NOV., 1971 15...	--	--	--	190	--	377	7.9	11.0
MAR., 1972 17...	--	--	--	140	--	307	7.9	5.0
MAY 09...	--	--	--	--	--	282	--	14.5
JULY 14...	--	--	--	--	--	320	--	21.5
18...	--	--	--	100	--	229	7.5	20.0
SEP. 13...	.048	.15	192	160	27	331	7.8	21.0
03134300 - MUDDY FORK NEAR ROWSBURG, OHIO (LAT 40 50 10 LONG 082 08 16)								
JUNE, 1972 07...	--	--	--	300	--	724	8.1	20.0
SEP. 05...	.020	.06	430	300	110	702	8.0	18.5
03135000 - LAKE F BL MOHICANVILLE DAM NR MOHICANVILLE (LAT 40 43 24 LONG 082 09 18)								
NOV., 1971 15...	--	--	--	270	--	702	7.4	10.0
JAN., 1972 26...	--	--	--	--	--	635	--	3.0
MAR. 21...	--	--	--	--	--	473	--	8.0
APR. 21...	--	--	--	100	--	242	7.6	10.5
MAY 15...	--	--	--	220	--	495	7.7	16.5
AUG. 07...	--	--	--	--	--	451	--	19.0
SEP. 21...	.15	.46	302	220	78	480	7.4	17.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE OHIO RIVER BASIN

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

03136000 - MOHICAN RIVER AT GREER, OHIO (LAT 40 30 53 LONG 082 11 44)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
19...	1110	167	--	--	--	--	--	--	--
JAN., 1972									
21...	1050	490	--	--	77	35	--	3.6	16
MAR.									
15...	1220	3100	--	--	--	--	--	--	--
APR.									
22...	1145	5440	--	--	37	13	--	1.9	8.4
25...	1430	4220	--	--	--	--	--	--	--
MAY									
01...	1245	2460	--	--	--	--	--	--	--
22...	1505	862	--	--	--	--	--	--	--
JULY									
18...	1400	2470	--	--	36	13	--	2.2	9.7
SEP.									
11...	1220	256	189	8	49	24	.2	1.3	5.6

03136500 - KOKOSING RIVER AT MOUNT VERNON, OHIO (LAT 40 24 20 LONG 082 30 00)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
22...	1415	19	--	--	--	--	--	--	--
JAN., 1972									
18...	1445	121	--	--	55	20	--	2.2	9.8
MAR.									
09...	1500	336	--	--	49	19	--	2.9	13
MAY									
02...	1445	235	--	--	--	--	--	--	--
JUNE									
20...	1220	56	--	--	53	21	--	1.1	4.9
AUG.									
22...	1215	131	--	--	--	--	--	--	--

03137000 - KOKOSING RIVER AT MILLWOOD, OHIO (LAT 40 23 51 LONG 082 17 09)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
23...	1245	58	--	--	--	--	--	--	--
JAN., 1972									
19...	1415	300	--	--	42	20	--	2.4	11
FEB.									
08...	1230	775	--	--	--	--	--	--	--
MAR.									
09...	1300	725	--	--	--	--	--	--	--
17...	1050	2040	--	--	--	--	--	--	--
APR.									
13...	1445	6120	--	--	--	--	--	--	--
MAY									
02...	1245	--	--	--	42	16	--	1.8	7.7
12...	1245	490	--	--	--	--	--	--	--
AUG.									
22...	1340	281	--	--	38	26	--	1.2	5.1

03138500 - WALHONDING R BL MOHAWK DAM AT NELLIE OH (LAT 40 20 29 LONG 082 03 56)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
10...	1100	235	--	--	--	--	--	--	--
JAN., 1972									
18...	1050	1040	--	--	76	42	--	3.3	15
MAR.									
23...	1150	4700	--	--	50	27	--	3.4	15
APR.									
22...	1435	3260	--	--	--	--	--	--	--
MAY									
19...	1215	2090	--	--	--	--	--	--	--
JULY									
18...	1335	6020	--	--	26	17	--	2.0	8.7
SEP.									
11...	1520	418	216	0	48	24	.2	1.0	4.4

03138800 - KILLBUCK CREEK AT WOOSTER, OHIO (LAT 40 48 03 LONG 081 58 30)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
31...	1025	18	96	0	74	30	.2	.60	2.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
03136000 - MOHICAN RIVER AT GREER, OHIO (LAT 40 30 53 LONG 082 11 44)								
NOV., 1971 19...	--	--	--	--	--	511	--	8.0
JAN., 1972 21...	--	--	--	230	--	540	8.1	2.0
MAR. 15...	--	--	--	--	--	414	--	6.0
APR. 22...	--	--	--	110	--	262	8.2	11.5
25...	--	--	--	--	--	303	--	13.0
MAY 01...	--	--	--	--	--	329	--	13.0
22...	--	--	--	--	--	411	--	19.0
JULY 18...	--	--	--	140	--	304	8.2	22.0
SEP. 11...	.15	.45	292	220	52	469	8.5	17.0
03136500 - KOKOSING RIVER AT MOUNT VERNON, OHIO (LAT 40 24 20 LONG 082 30 00)								
NOV., 1971 22...	--	--	--	--	--	584	--	3.6
JAN., 1972 18...	--	--	--	240	--	407	7.8	.0
MAR. 09...	--	--	--	190	--	390	8.3	2.5
MAY 02...	--	--	--	--	--	432	--	17.5
JUNE 20...	--	--	--	270	--	523	8.2	17.5
AUG. 22...	--	--	--	--	--	448	--	21.0
03137000 - KOKOSING RIVER AT MILLWOOD, OHIO (LAT 40 23 51 LONG 082 17 09)								
NOV., 1971 23...	--	--	--	--	--	462	--	1.0
JAN., 1972 19...	--	--	--	200	--	419	7.6	.0
FEB. 18...	--	--	--	--	--	--	--	4.5
MAR. 09...	--	--	--	--	--	--	--	2.5
17...	--	--	--	--	--	--	--	6.0
APR. 13...	--	--	--	--	--	--	--	14.5
MAY 02...	--	--	--	200	--	399	8.2	17.0
12...	--	--	--	--	--	--	--	--
AUG. 22...	--	--	--	220	--	425	8.4	22.0
03138500 - WALHONDING R BL MOHAWK DAM AT NELLIE OH (LAT 40 20 29 LONG 082 03 56)								
NOV., 1971 18...	--	--	--	--	--	488	--	5.0
JAN., 1972 18...	--	--	--	250	--	570	7.9	2.0
MAR. 23...	--	--	--	160	--	379	7.1	5.0
APR. 22...	--	--	--	--	--	258	--	14.0
MAY 19...	--	--	--	--	--	390	--	17.0
JULY 18...	--	--	--	120	--	293	7.3	22.0
SEP. 11...	.13	.40	306	230	53	481	8.1	19.0
03138800 - KILLBUCK CREEK AT WOOSTER, OHIO (LAT 40 48 03 LONG 081 58 30)								
JULY, 1972 31...	.022	.07	224	150	72	391	8.2	23.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
MUSKINGUM RIVER BASIN--Continued									
03139000 - KILLBUCK CREEK AT KILLBUCK, OHIO (LAT 40 29 41 LONG 081 59 12)									
NOV., 1971									
19...	1405	65	--	--	--	--	--	--	--
JAN., 1972									
21...	--	179	--	--	57	26	--	1.7	7.7
MAR.									
15...	1445	1400	--	--	--	--	--	--	--
APR.									
21...	1230	2400	--	--	49	15	--	2.3	10
25...	1130	1850	--	--	--	--	--	--	--
MAY									
22...	1150	292	--	--	--	--	--	--	--
JULY									
10...	1130	281	--	--	64	23	--	2.2	9.7
31...	1445	198	--	--	--	--	--	--	--
SEP.									
05...	1325	147	--	--	--	--	--	--	--
21...	1120	287	170	0	52	22	.2	.80	3.6
03140000 - MILL CREEK NEAR COSHOCTON, OHIO (LAT 40 21 46 LONG 081 51 45)									
NOV., 1971									
17...	1400	1.3	--	--	--	--	--	--	--
JAN., 1972									
14...	1050	21	--	--	51	11	--	2.5	11
MAR.									
16...	1040	139	--	--	45	8.4	--	2.2	10
MAY									
18...	1100	26	--	--	--	--	--	--	--
JULY									
10...	1335	37	--	--	72	14	--	1.9	8.5
24...	1705	4.2	--	--	--	--	--	--	--
SEP.									
05...	1130	1.5	122	0	40	17	.2	.30	1.2
22...	1110	.95	--	--	--	--	--	--	--
03140500 - MUSKINGUM RIVER NEAR COSHOCTON, OHIO (LAT 40 14 54 LONG 081 52 23)									
NOV., 1971									
01...	1420	772	--	--	--	--	--	--	--
JAN., 1972									
13...	1220	4890	--	--	140	160	--	2.8	12
MAR.									
01...	1400	5460	--	--	140	120	--	2.3	10
MAY									
01...	1500	10100	--	--	--	--	--	--	--
JULY									
07...	1110	4300	--	--	96	110	--	2.6	12
AUG.									
31...	1345	2040	162	0	110	100	.3	1.0	4.2
03140700 - BUFFALO FORK AT PLEASANT CITY, OHIO (LAT 39 54 15 LONG 081 33 14)									
JULY, 1972									
28...	--	--	--	--	530	10	--	.30	1.3
SEP.									
07...	1215	8.1	130	0	1000	17	.6	1.1	4.7
03140800 - BUFFALO CREEK AT PLEASANT CITY, OHIO (LAT 39 54 10 LONG 081 33 03)									
JULY, 1972									
28...	1210	--	--	--	960	33	--	.30	1.4
SEP.									
07...	1125	4.5	168	0	140	10	.2	.40	1.8
03141500 - SENECA F BL SENECAVILLE DAM NR SENECAVILLE (LAT 39 55 28 LONG 081 26 17)									
NOV., 1971									
16...	1410	290	--	--	--	--	--	--	--
JAN., 1972									
13...	1200	298	--	--	69	7.2	--	.40	1.9
MAR.									
10...	1345	283	--	--	--	--	--	--	--
APR.									
28...	1100	683	--	--	68	5.9	--	.40	1.6
JUNE									
14...	1320	5.6	--	--	68	7.1	--	.60	2.6
AUG.									
22...	1310	2.9	--	--	--	--	--	--	--
SEP.									
06...	1410	6.0	70	0	59	22	.2	.30	1.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

03139000 - KILLBUCK CREEK AT KILLBUCK, OHIO (LAT 40 29 41 LONG 081 59 12)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 19...	--	--	--	--	--	522	--	9.0
JAN., 1972 21...	--	--	--	140	--	419	7.6	2.0
MAR. 15...	--	--	--	--	--	374	--	6.0
APR. 21...	--	--	--	140	--	313	7.3	10.0
25...	--	--	--	--	--	284	--	11.5
MAY 22...	--	--	--	--	--	404	--	19.0
JULY 10...	--	--	--	210	--	461	8.3	18.5
31...	--	--	--	--	--	454	--	22.0
SEP. 05...	--	--	--	--	--	391	--	16.5
21...	.14	.44	258	200	60	432	8.0	--

03140000 - MILL CREEK NEAR COSHOCTON, OHIO (LAT 40 21 46 LONG 081 51 45)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 17...	--	--	--	--	--	330	--	10.0
JAN., 1972 14...	--	--	--	110	--	262	8.0	2.0
MAR. 16...	--	--	--	93	--	223	8.1	6.0
MAY 18...	--	--	--	--	--	257	--	14.5
JULY 10...	--	--	--	130	--	315	7.2	19.0
24...	--	--	--	--	--	324	--	25.5
SEP. 05...	.011	.03	200	130	30	320	8.1	14.5
22...	--	--	--	--	--	329	--	16.0

03140500 - MUSKINGUM RIVER NEAR COSHOCTON, OHIO (LAT 40 14 54 LONG 081 52 23)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 01...	--	--	--	--	--	2060	--	17.0
JAN., 1972 13...	--	--	--	330	--	935	7.9	4.0
MAR. 01...	--	--	--	300	--	823	7.7	5.0
MAY 01...	--	--	--	--	--	513	--	15.5
JULY 07...	--	--	--	250	--	697	8.0	18.5
AUG. 31...	.034	.11	470	290	160	774	8.0	23.0

03140700 - BUFFALO FORK AT PLEASANT CITY, OHIO (LAT 39 54 15 LONG 081 33 14)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JULY, 1972 28...	--	--	--	600	--	1060	7.6	25.0
SEP. 07...	.059	.18	1770	1200	1100	1880	7.6	18.0

03140800 - BUFFALO CREEK AT PLEASANT CITY, OHIO (LAT 39 54 10 LONG 081 33 03)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JULY, 1972 28...	--	--	--	1100	--	1790	8.9	24.0
SEP. 07...	.14	.44	356	270	130	532	7.9	18.0

03141500 - SENECA F BL SENECAVILLE DAM NR SENECAVILLE (LAT 39 55 28 LONG 081 26 17)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 16...	--	--	--	--	--	350	--	11.5
JAN., 1972 13...	--	--	--	190	--	371	8.2	5.0
MAR. 10...	--	--	--	--	--	386	--	3.5
APR. 28...	--	--	--	170	--	353	7.9	13.5
JUNE 14...	--	--	--	190	--	389	7.9	18.0
AUG. 22...	--	--	--	--	--	374	--	24.0
SEP. 06...	.045	.14	164	120	62	308	7.3	24.0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
MUSKINGUM RIVER BASIN--Continued									
03141900 - LEATHERWOOD CREEK NEAR CAMBRIDGE, OHIO (LAT 40 01 18 LONG 081 32 51)									
JULY, 1972									
28...	1410	--	--	--	390	14	--	.40	1.8
SEP.									
07...	1435	4.4	138	0	230	23	.3	.30	1.4
03142000 - WILLS CREEK AT CAMBRIDGE, OHIO (LAT 40 00 52 LONG 081 35 14)									
NOV., 1971									
11...	1340	19	--	--	--	--	--	--	--
JAN., 1972									
18...	1345	132	--	--	180	18	--	.60	2.5
MAR.									
13...	1350	641	--	--	140	17	--	.70	3.2
MAY									
24...	1250	117	--	--	--	--	--	--	--
JULY									
20...	1105	264	--	--	110	7.8	--	.60	2.8
SEP.									
25...	1020	24	176	6	450	48	.5	.10	.6
03142295 - SALT F BL SALT F DAM NR CAMBRIDGE OH (LAT 40 06 15 LONG 081 33 15)									
NOV., 1971									
11...	1050	.55	--	--	--	--	--	--	--
JAN., 1972									
18...	1030	151	--	--	66	13	--	.60	2.6
MAR.									
17...	1225	528	--	--	--	--	--	--	--
APR.									
20...	1220	656	--	--	62	12	--	.90	3.9
MAY									
22...	1100	141	--	--	--	--	--	--	--
JULY									
20...	1330	34	--	--	63	8.4	--	.30	1.4
SEP.									
14...	1300	8.8	--	--	--	--	--	--	--
25...	1410	5.6	72	0	59	9.2	.2	.30	1.4
03143500 - WILLS C BL WILLS C DAM AT WILLS CREEK OH (LAT 40 09 34 LONG 081 50 51)									
NOV., 1971									
10...	1510	44	--	--	--	--	--	--	--
JAN., 1972									
18...	1515	614	--	--	130	21	--	.80	3.4
MAR.									
23...	1445	1920	--	--	--	--	--	--	--
APR.									
27...	1450	4230	--	--	100	11	--	.80	3.4
MAY									
19...	1510	948	--	--	--	--	--	--	--
JULY									
12...	1450	323	--	--	200	18	--	.90	3.8
SEP.									
12...	1500	63	122	0	180	24	.3	.20	1.0
03144000 - WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO (LAT 40 07 57 LONG 082 08 53)									
OCT., 1971									
01...	1430	10	--	--	--	--	--	--	--
NOV.									
17...	1245	8.4	--	--	--	--	--	--	--
JAN., 1972									
21...	1300	56	--	--	28	60	--	.80	3.8
MAR.									
04...	1415	370	--	--	--	--	--	--	--
21...	1230	190	--	--	27	37	--	1.5	6.8
APR.									
13...	1100	1280	--	--	--	--	--	--	--
JUNE									
27...	1345	29	--	--	21	41	--	.70	3.0
AUG.									
22...	1430	22	104	0	21	79	.1	.60	2.6
03145000 - SOUTH FORK LICKING RIVER NEAR HEBRON, OHIO (LAT 39 59 19 LONG 082 28 30)									
NOV., 1971									
17...	1500	3.4	--	--	--	--	--	--	--
JAN., 1972									
19...	0945	40	--	--	66	34	--	2.9	13
MAR.									
14...	1500	111	--	--	72	28	--	2.9	13
MAY									
03...	1000	46	--	--	--	--	--	--	--
JULY									
05...	1100	38	--	--	60	33	--	3.5	15

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MUSKINGUM RIVER BASIN--Continued								
03141900 - LEATHERWOOD CREEK NEAR CAMBRIDGE, OHIO (LAT 40 01 18 LONG 081 32 51)								
JULY, 1972 28...	--	--	--	470	--	983	7.8	25.0
SEP. 07...	.056	.17	488	320	210	717	7.6	20.0
03142000 - WILLS CREEK AT CAMBRIDGE, OHIO (LAT 40 00 52 LONG 081 35 14)								
NOV., 1971 11...	--	--	--	--	--	1080	--	5.5
JAN., 1972 18...	--	--	--	290	--	620	8.2	.5
MAR. 13...	--	--	--	240	--	523	7.5	8.5
MAY 24...	--	--	--	--	--	703	--	17.0
JULY 20...	--	--	--	220	--	457	7.8	25.0
SEP. 25...	.26	.79	866	550	400	1160	8.5	17.0
03142295 - SALT F BL SALT F DAM NR CAMBRIDGE OH (LAT 40 06 15 LONG 081 33 15)								
NOV., 1971 11...	--	--	--	--	--	264	--	10.0
JAN., 1972 18...	--	--	--	130	--	292	7.7	2.5
MAR. 17...	--	--	--	--	--	294	--	4.5
APR. 20...	--	--	--	100	--	255	7.2	12.5
MAY 22...	--	--	--	--	--	231	--	20.5
JULY 20...	--	--	--	110	--	250	7.5	25.0
SEP. 14...	--	--	--	--	--	271	--	22.5
25...	.039	.12	172	120	61	272	7.3	22.0
03143500 - WILLS C BL WILLS C DAM AT WILLS CREEK OH (LAT 40 09 34 LONG 081 50 51)								
NOV., 1971 10...	--	--	--	--	--	874	--	5.0
JAN., 1972 18...	--	--	--	210	--	494	7.5	5.0
MAR. 23...	--	--	--	--	--	394	--	6.0
APR. 27...	--	--	--	160	--	360	7.3	13.0
MAY 19...	--	--	--	--	--	462	--	12.0
JULY 12...	--	--	--	280	--	604	7.6	25.5
SEP. 12...	.075	.23	400	260	160	584	8.2	22.0
03144000 - WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO (LAT 40 07 57 LONG 082 08 53)								
OCT., 1971 01...	--	--	--	--	--	--	--	23.0
NOV. 17...	--	--	--	--	--	376	--	10.0
JAN., 1972 21...	--	--	--	140	--	369	8.0	2.5
MAR. 04...	--	--	--	--	--	273	--	16.0
21...	--	--	--	100	--	271	7.8	9.0
APR. 13...	--	--	--	--	--	--	--	14.0
JUNE 27...	--	--	--	130	--	340	7.8	17.5
AUG. 22...	.024	.08	260	150	65	436	7.9	23.0
03145000 - SOUTH FORK LICKING RIVER NEAR HEBRON, OHIO (LAT 39 59 19 LONG 082 28 30)								
NOV., 1971 17...	--	--	--	--	--	735	--	11.0
JAN., 1972 19...	--	--	--	250	--	549	7.5	.0
MAR. 14...	--	--	--	250	--	525	8.4	8.5
MAY 03...	--	--	--	--	--	529	--	17.0
JULY 05...	--	--	--	230	--	509	7.9	17.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MUSKINGUM RIVER BASIN--Continued

03146250 - NORTH FORK LICKING RIVER ABOVE NEWARK,OHIO (LAT 40 06 19 LONG 082 25 02)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
JUNE, 1972									
07...	0940	--	--	--	74	13	--	.70	2.9
AUG.									
15...	1400	32	248	2	77	13	.2	.30	1.2

03148450 - JONATHAN CREEK AT EAST FULTONHAM, OHIO (LAT 39 51 20 LONG 082 07 35)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
11...	1220	3.2	134	0	170	120	.3	.20	.8

03148600 - MOXAHALA CREEK NEAR ZANESVILLE, OHIO (LAT 39 53 48 LONG 082 00 20)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
11...	1045	19	0	0	1200	68	1.2	.30	1.2

03149500 - SALT CREEK NEAR CHANDLERSVILLE, OHIO (LAT 39 54 31 LONG 081 51 38)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
28...	0930	--	--	--	36	94	--	1.2	5.2
AUG.									
11...	0935	2.0	154	4	39	50	.2	.00	.0

03150250 - MEIGS CREEK NEAR BEVERLY, OHIO (LAT 39 36 00 LONG 081 42 42)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
MAR., 1972									
01...	1130	155	--	--	280	7.8	--	.20	.7
15...	1445	144	--	--	--	--	--	--	--
MAY									
10...	1743	202	--	--	--	--	--	--	--
JUNE									
29...	1345	88	--	--	340	8.7	--	.40	1.8
AUG.									
23...	1100	35	--	--	--	--	--	--	--
SEP.									
18...	1440	9.4	206	0	600	26	.4	.50	2.0

03150480 - WEST BRANCH WOLF CREEK NEAR WATERFORD,OHIO (LAT 39 31 43 LONG 081 39 22)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
26...	1530	--	--	--	36	9.0	--	.40	1.5
SEP.									
06...	1150	19	178	8	39	13	.1	.20	1.1

03150490 - S B WOLF C NR WATERFORD OH (LAT 39 31 28 LONG 081 39 31)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
26...	1620	--	--	--	53	15	--	.60	2.5
SEP.									
06...	1045	7.2	126	0	52	25	.1	.60	2.9

LITTLE HOCKING RIVER BASIN

03155800 - L HOCKING R NR L HOCKING OH (LAT 39 17 38 LONG 081 41 17)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
JULY, 1972									
26...	1345	--	--	--	53	11	--	.90	4.0
SEP.									
06...	0840	1.9	104	0	43	8.2	.2	.60	2.6

HOCKING RIVER BASIN

03156000 - HUNTERS RUN AT LANCASTER, OHIO (LAT 39 41 57 LONG 082 37 18)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
12...	1015	--	316	0	55	13	.2	.50	2.3
DEC.									
16...	1205	4.7	--	--	60	22	--	1.8	8.0
FEB., 1972									
07...	1225	2.9	--	--	--	--	--	--	--
APR.									
05...	1325	6.0	--	--	65	21	--	1.8	8.1
MAY									
24...	1500	7.8	--	--	--	--	--	--	--
JULY									
20...	1230	2.9	--	--	55	15	--	.50	2.2
AUG.									
24...	1135	1.8	310	0	51	14	.2	.60	2.6

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MUSKINGUM RIVER BASIN--Continued								
03146250 - NORTH FORK LICKING RIVER ABOVE NEWARK,OHIO (LAT 40 06 19 LONG 082 25 02)								
JUNE, 1972 07...	--	--	--	290	--	540	8.2	15.0
AUG. 15...	.018	.06	352	290	83	553	8.3	22.0
03148450 - JONATHAN CREEK AT EAST FULTONHAM, OHIO (LAT 39 51 20 LONG 082 07 35)								
AUG., 1972 11...	.084	.26	542	370	260	886	7.9	18.5
03148600 - MOXAHALA CREEK NEAR ZANESVILLE, OHIO (LAT 39 53 48 LONG 082 00 20)								
AUG., 1972 11...	.045	.14	1850	1200	1200	2340	2.9	19.0
03149500 - SALT CREEK NEAR CHANDLERSVILLE, OHIO (LAT 39 54 31 LONG 081 51 38)								
JULY, 1972 28...	--	--	--	180	--	538	7.7	24.0
AUG. 11...	.017	.05	310	170	38	464	8.4	16.5
03150250 - MEIGS CREEK NEAR BEVERLY, OHIO (LAT 39 36 00 LONG 081 42 42)								
MAR., 1972 01...	--	--	--	450	--	825	7.7	10.0
15...	--	--	--	--	--	913	--	10.0
MAY 10...	--	--	--	--	--	901	--	14.5
JUNE 29...	--	--	--	520	--	961	7.9	17.0
AUG. 23...	--	--	--	--	--	1100	--	22.0
SEP. 18...	.036	.11	1090	770	600	1360	7.6	22.0
03150480 - WEST BRANCH WOLF CREEK NEAR WATERFORD,OHIO (LAT 39 31 43 LONG 081 39 22)								
JULY, 1972 26...	--	--	--	170	--	368	8.0	26.5
SEP. 06...	.011	.03	246	190	30	397	8.6	18.0
03150490 - S B WOLF C NR WATERFORD OH (LAT 39 31 28 LONG 081 39 31)								
JULY, 1972 26...	--	--	--	150	--	360	7.7	26.0
SEP. 06...	.062	.19	208	140	37	371	8.2	17.0
LITTLE HOCKING RIVER BASIN								
03155800 - L HOCKING R NR L HOCKING OH (LAT 39 17 38 LONG 081 41 17)								
JULY, 1972 26...	--	--	--	150	--	370	8.2	23.5
SEP. 06...	.048	.15	172	110	25	282	7.9	17.0
HOCKING RIVER BASIN								
03156000 - HUNTERS RUN AT LANCASTER, OHIO (LA, 39 41 57 LONG 082 37 18)								
OCT., 1971 12...	.030	.10	360	310	50	580	7.8	19.5
DEC. 16...	--	--	--	310	--	610	7.7	9.0
FEB., 1972 07...	--	--	--	--	--	606	--	1.0
APR. 05...	--	--	--	260	--	521	7.9	10.0
MAY 24...	--	--	--	--	--	398	--	24.0
JULY 20...	--	--	--	290	--	540	8.1	24.0
AUG. 24...	.17	.52	362	320	66	594	8.1	19.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
HOCKING RIVER BASIN--Continued									
03156400 - HOCKING RIVER AT LANCASTER, OHIO (LAT 39 42 24 LONG 082 36 03)									
OCT., 1971 12...	1435	--	314	0	71	400	.4	.70	3.0
DEC. 06...	1510	57	--	--	39	17	--	.10	.3
FEB., 1972 07...	1430	12	--	--	--	--	--	--	--
APR. 05...	1225	40	--	--	68	19	--	2.7	12
MAY 26...	1010	25	--	--	63	18	--	1.6	7.1
AUG. 24...	1155	18	196	10	44	16	.2	.60	2.7
SEP. 08...	1045	6.2	--	--	--	--	--	--	--
03156700 - RUSH CREEK NEAR SUGAR GROVE, OHIO (LAT 39 38 18 LONG 082 30 42)									
AUG., 1972 11...	1430	22	78	0	280	42	.4	1.4	6.1
03157000 - CLEAR CREEK NEAR ROCKBRIDGE, OHIO (LAT 39 35 18 LONG 082 34 43)									
OCT., 1971 12...	1355	--	202	0	25	7.7	.2	--	3.2
DEC. 16...	1440	51	--	--	47	11	--	2.4	11
FEB., 1972 08...	1145	35	--	--	--	--	--	--	--
APR. 04...	1510	114	--	--	45	9.7	--	1.8	7.7
MAY 23...	1130	69	--	--	41	8.8	--	1.6	7.2
AUG. 01...	1415	17	--	--	--	--	--	--	--
SEP. 18...	1045	14	190	0	25	7.0	.1	.80	3.8
03157500 - HOCKING RIVER AT ENTERPRISE, OHIO (LAT 39 33 54 LONG 082 28 29)									
OCT., 1971 18...	1150	--	198	0	160	93	.4	2.0	8.9
DEC. 06...	1220	133	--	--	110	80	--	2.2	9.7
FEB., 1972 10...	1400	142	--	--	--	--	--	--	--
MAY 23...	1405	296	--	--	97	51	--	1.4	6.3
SEP. 08...	1400	89	110	10	170	77	.3	.80	3.3
03158200 - MONDAY CREEK AT DOANVILLE, OHIO (LAT 39 26 07 LONG 082 11 30)									
AUG., 1972 10...	1345	7.6	0	0	790	57	.8	.09	.4
03159000 - SUNDAY CREEK AT GLOUSTER, OHIO (LAT 39 30 03 LONG 082 05 07)									
DEC., 1971 14...	1145	11	--	--	390	41	--	.30	1.3
FEB., 1972 09...	1115	21	--	--	--	--	--	--	--
MAR. 28...	1155	114	--	--	140	28	--	.50	2.2
MAY 31...	1130	21	--	--	220	37	--	.10	.5
SEP. 14...	1130	93	64	0	47	16	.1	1.0	4.6
03159500 - HOCKING RIVER AT ATHENS, OHIO (LAT 39 19 44 LONG 082 05 18									
DEC., 1971 15...	1210	305	--	--	--	--	--	--	--
29...	1330	248	--	--	240	120	--	1.3	5.8
FEB., 1972 03...	1135	347	--	--	--	--	--	--	--
JUNE 01...	1105	428	--	--	200	57	--	.70	3.1
SEP. 11...	1245	148	60	0	270	78	.3	.90	4.2

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

H[illegible]CKING RIVER BASIN—CONTINUED

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
03156400 - HOCKING RIVER AT LANCASTER, OHIO (LAT 39 42 24 LONG 082 36 03)								
OCT., 1971 12...	.090	.26	1140	590	330	1790	7.7	--
DEC. 06...	--	--	--	160	--	364	7.3	--
FEB., 1972 07...	--	--	--	--	--	620	--	3.0
APR. 05...	--	--	--	270	--	537	8.5	9.5
MAY 26...	--	--	--	300	--	579	8.0	18.5
AUG. 24...	.028	.09	274	220	43	458	8.5	22.0
SEP. 08...	--	--	--	--	--	709	--	18.5
03156700 - RUSH CREEK NEAR SUGAR GROVE, OHIO (LAT 39 38 18 LONG 082 30 42)								
AUG., 1972 11...	.031	.10	602	380	320	793	7.7	19.0
03157000 - CLEAR CREEK NEAR ROCKBRIDGE, OHIO (LAT 39 35 18 LONG 082 34 43)								
OCT., 1971 12...	.030	.09	206	190	24	381	7.5	10.5
DEC. 16...	--	--	--	230	--	422	8.0	9.0
FEB., 1972 08...	--	--	--	--	--	383	--	.5
APR. 04...	--	--	--	200	--	386	8.1	8.5
MAY 23...	--	--	--	190	--	367	8.4	17.5
AUG. 01...	--	--	--	--	--	365	--	19.5
SEP. 18...	.030	.09	210	180	24	349	8.2	19.5
03157500 - HOCKING RIVER AT ENTERPRISE, OHIO (LAT 39 33 54 LONG 082 28 29)								
OCT., 1971 18...	.57	1.8	580	340	180	896	7.3	6.0
DEC. 06...	--	--	--	270	--	707	8.3	5.5
FEB., 1972 10...	--	--	--	--	--	821	--	1.0
MAY 23...	--	--	--	240	--	544	7.9	21.0
SEP. 08...	.18	.57	472	300	190	735	8.8	18.5
03158200 - MONDAY CREEK AT DOANVILLE, OHIO (LAT 39 26 07 LONG 082 11 30)								
AUG., 1972 10...	.000	.00	1200	640	640	1760	2.9	18.5
03159000 - SUNDAY CREEK AT GLOUSTER, OHIO (LAT 39 30 03 LONG 082 05 07)								
DEC., 1971 14...	--	--	--	280	--	1180	3.2	6.0
FEB., 1972 09...	--	--	--	--	--	1250	--	5.0
MAR. 28...	--	--	--	160	--	430	7.2	7.0
MAY 31...	--	--	--	330	--	1350	3.1	16.0
SEP. 14...	.17	.53	156	100	48	260	7.0	18.0
03159500 - HOCKING RIVER AT ATHENS, OHIO (LAT 39 19 44 LONG 082 05 10)								
DEC., 1971 15...	--	--	--	--	--	798	--	8.0
29...	--	--	--	370	--	950	8.0	8.0
FEB., 1972 03...	--	--	--	--	--	789	--	2.0
JUNE 01...	--	--	--	310	--	741	7.6	--
SEP. 11...	.006	.02	604	360	310	877	7.7	22.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
HOCKING RIVER BASIN--Continued									
03159520 - FEDERAL CREEK NEAR STEWART, OHIO (LAT 39 20 30 LONG 081 53 03)									
AUG., 1972 10...	1200	3.2	124	0	220	38	.3	.20	1.1
SHADE RIVER BASIN									
03159540 - SHADE RIVER NEAR CHESTER, OHIO (LAT 39 03 49 LONG 081 52 55)									
OCT., 1971 15...	1515	8.8	82	0	120	14	.2	.30	1.2
DEC. 09...	1045	270	--	--	--	--	--	--	--
09...	1055	268	--	--	77	8.2	--	.80	3.6
FEB., 1972 02...	1715	90	--	--	--	--	--	--	--
MAR. 27...	1220	162	--	--	78	7.3	--	.40	1.9
APR. 17...	0845	778	--	--	--	--	--	--	--
MAY 31...	1620	26	--	--	81	19	--	.40	1.9
SEP. 11...	1645	3.1	100	0	130	17	.2	.20	1.0
18...	1715	5.4	--	--	--	--	--	--	--
LEADING CREEK BASIN									
03160050 - LEADING CREEK NEAR MIDDLEPORT, OHIO (LAT 39 00 31 LONG 082 05 07)									
AUG., 1972 10...	1025	2.0	92	0	120	43	.3	.20	.8
RACCOON CREEK BASIN									
03201990 - LITTLE RACCOON CREEK NEAR VINTON, OHIO (LAT 38 57 12 LONG 082 21 57)									
AUG., 1972 10...	0850	14	0	0	360	7.3	.8	.40	1.9
INDIAN GUYAN CREEK BASIN									
03205210 - INDIAN GUYAN CREEK NEAR BRADRICK, OHIO (LAT 38 28 41 LONG 082 23 54)									
SEP., 1972 13...	1410	3.6	86	0	92	8.5	.2	.20	.8
PINE CREEK BASIN									
03216640 - PINE CREEK NEAR WHEELERSBURG, OHIO (LAT 38 39 12 LONG 082 48 09)									
SEP., 1972 13...	1200	2.0	5	0	390	12	.4	.30	1.4
LITTLE SCIOTO RIVER BASIN									
03216700 - LITTLE SCIOTO RIVER AT SCIOTOVILLE, OHIO (LAT 38 46 19 LONG 082 52 38)									
SEP., 1972 13...	1030	2.0	73	0	37	17	.2	.60	2.9
SCIOTO RIVER BASIN									
03217400 - SCIOTO RIVER NEAR KENTON, OHIO (LAT 40 38 50 LONG 083 38 20)									
AUG., 1972 10...	1045	11	278	6	280	16	.6	1.8	7.9
03217500 - SCIOTO RIVER AT LARUE, OHIO (LAT 40 34 28 LONG 083 23 15)									
AUG., 1972 17...	1205	11	264	24	270	24	.7	1.7	7.4
03217600 - RUSH CREEK NEAR LARUE, OHIO (LAT 40 33 33 LONG 083 19 57)									
AUG., 1972 08...	1205	4.1	184	0	110	15	.4	.60	2.4
03218000 - LITTLE SCIOTO RIVER ABOVE MARION, OHIO (LAT 40 37 43 LONG 083 10 11)									
OCT., 1971 01...	1200	--	212	0	140	20	.7	.30	1.5
AUG., 1972 09...	1510	3.4	204	0	120	25	.6	1.0	4.6

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
HOCKING RIVER BASIN--Continued								
03159520 - FEDERAL CREEK NEAR STEWART, OHIO (LAT 39 20 30 LONG 081 53 03)								
AUG., 1972								
10...	.011	.03	508	340	240	727	7.7	19.0
SHADE RIVER BASIN								
03159540 - SHADE RIVER NEAR CHESTER, OHIO (LAT 39 03 49 LONG 081 52 55)								
OCT., 1971								
15...	.040	.12	234	170	100	410	6.9	14.0
DEC.								
09...	--	--	--	--	--	--	--	10.0
09...	--	--	--	120	--	281	7.9	10.0
FEB., 1972								
02...	--	--	--	--	--	368	--	1.5
MAR.								
27...	--	--	--	140	--	315	7.9	5.5
APR.								
17...	--	--	--	--	--	--	--	--
MAY								
31...	--	--	--	170	--	380	8.2	--
SEP.								
11...	.056	.17	280	220	140	476	7.6	--
18...	--	--	--	--	--	--	--	21.0
LEADING CREEK BASIN								
03160050 - LEADING CREEK NEAR MIDDLEPORT, OHIO (LAT 39 00 31 LONG 082 05 07)								
AUG., 1972								
10...	.067	.21	314	190	110	512	7.6	18.0
RACCOON CREEK BASIN								
03201990 - LITTLE RACCOON CREEK NEAR VINTON, OHIO (LAT 38 57 12 LONG 082 21 57)								
AUG., 1972								
10...	.030	.09	468	300	300	766	3.7	18.5
INDIAN GUYAN CREEK BASIN								
03205210 - INDIAN GUYAN CREEK NEAR BRADRICK, OHIO (LAT 38 28 41 LONG 082 23 54)								
SEP., 1972								
13...	.006	.02	210	150	80	352	8.1	21.5
PINE CREEK BASIN								
03216640 - PINE CREEK NEAR WHEELERSBURG, OHIO (LAT 38 39 12 LONG 082 48 09)								
SEP., 1972								
13...	.000	.00	606	350	340	789	6.1	20.5
LITTLE SCIOTO RIVER BASIN								
03216700 - LITTLE SCIOTO RIVER AT SCIOTOVILLE, OHIO (LAT 38 46 19 LONG 082 52 38)								
SEP., 1972								
13...	.027	.08	156	100	40	256	7.8	20.0
SCIOTO RIVER BASIN								
03217400 - SCIOTO RIVER NEAR KENTON, OHIO (LAT 40 38 50 LONG 083 38 20)								
AUG., 1972								
10...	.078	.24	680	540	300	926	8.4	18.0
03217500 - SCIOTO RIVER AT LARUE, OHIO (LAT 40 34 28 LONG 083 23 15)								
AUG., 1972								
17...	.35	1.1	746	480	220	952	8.6	23.0
03217600 - RUSH CREEK NEAR LARUE, OHIO (LAT 40 33 33 LONG 083 19 57)								
AUG., 1972								
08...	.11	.34	348	260	110	528	8.1	19.5
03218000 - LITTLE SCIOTO RIVER ABOVE MARION, OHIO (LAT 40 37 43 LONG 083 10 11)								
OCT., 1971								
01...	.11	.34	422	320	150	647	7.6	24.5
AUG., 1972								
09...	.006	.02	382	320	150	618	8.2	19.5

SCIOTO RIVER BASIN --Continued

03219500 - SCIOTO RIVER NEAR PHOSPECT, OHIO (LAT 40 25 10 LONG 083 11 50)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
18...	1440	21	--	--	--	--	--	--	--
JAN., 1972									
14...	1230	600	--	--	130	23	--	4.7	21
FEB.									
11...	1130	100	--	--	--	--	--	--	--
28...	1055	129	--	--	--	--	--	--	--
APR.									
14...	1150	2860	--	--	--	--	--	--	--
24...	1225	6390	--	--	42	7.1	--	4.0	18
JUNE									
21...	1355	196	--	--	110	24	--	8.7	38
AUG.									
08...	1130	76	216	0	170	24	.5	3.8	17

03221000 - SCIOTO R BL OSHAUGHNESSY DAM NR DUBLIN OH (LAT 40 08 36 LONG 083 07 14)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
09...	1500	135	--	--	--	--	--	--	--
19...	1210	6.4	--	--	--	--	--	--	--
DEC.									
29...	1320	578	--	--	--	--	--	--	--
JAN., 1972									
18...	1145	420	--	--	--	--	--	--	--
27...	1320	440	--	--	120	26	--	4.7	21
FEB.									
29...	1520	265	--	--	--	--	--	--	--
APR.									
14...	1530	8420	--	--	--	--	--	--	--
25...	1430	5860	--	--	43	7.9	--	3.8	17
JUNE									
22...	1400	273	--	--	96	21	--	9.6	42
AUG.									
08...	1510	135	198	5	87	20	.4	3.8	17

03223000 - OLENTANGY RIVER AT CLARIDON, OHIO (LAT 40 34 58 LONG 082 59 20)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
05...	1435	3.2	--	--	--	--	--	--	--
NOV.									
01...	1425	5.8	--	--	--	--	--	--	--
02...	1500	6.5	--	--	--	--	--	--	--
03...	1600	6.7	--	--	--	--	--	--	--
26...	1515	7.5	--	--	--	--	--	--	--
DEC.									
02...	1600	32	--	--	--	--	--	--	--
JAN., 1972									
12...	1525	230	--	--	--	--	--	--	--
17...	1200	58	--	--	120	33	--	4.5	20
MAR.									
02...	1415	828	--	--	--	--	--	--	--
13...	1150	230	--	--	--	--	--	--	--
APR.									
13...	1415	1130	--	--	--	--	--	--	--
20...	1500	2880	--	--	24	5.8	--	2.6	12
22...	1440	2180	--	--	--	--	--	--	--
22...	1505	2180	--	--	--	--	--	--	--
MAY									
01...	1230	101	--	--	--	--	--	--	--
JUNE									
23...	1330	41	--	--	100	23	--	3.6	16
AUG.									
21...	1300	65	202	0	81	26	.2	2.2	9.6
SEP.									
21...	1445	33	--	--	--	--	--	--	--

03224500 - WHETSTONE CREEK NEAR ASHLEY, OHIO (LAT 40 27 18 LONG 082 57 28)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
22...	1020	6.2	--	--	--	--	--	--	--
JAN., 1972									
17...	1030	30	--	--	110	120	--	3.7	16
MAR.									
13...	1500	135	--	--	80	64	--	4.5	20
MAY									
01...	1530	58	--	--	--	--	--	--	--
JUNE									
23...	1100	19	--	--	82	98	--	2.5	11
AUG.									
21...	1210	108	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

SCIOTO RIVER BASIN--Continued

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
03219500 - SCIOTO RIVER NEAR PROSPECT, OHIO (LAT 40 25 10 LONG 083 11 50)								
NOV., 1971								
18...	--	--	--	--	--	1020	--	14.0
JAN., 1972								
14...	--	--	--	340	--	667	7.6	2.0
FEB.								
11...	--	--	--	--	--	901	--	.0
28...	--	--	--	--	--	804	--	3.0
APR.								
14...	--	--	--	--	--	376	--	15.5
24...	--	--	--	130	--	281	7.9	11.0
JUNE								
21...	--	--	--	350	--	676	8.6	18.0
AUG.								
08...	.61	1.9	496	370	190	738	7.6	22.0
03221000 - SCIOTO R BL OSHAUGHNESSY DAM NR DUBLIN OH (LAT 40 08 36 LONG 083 07 14)								
NOV., 1971								
09...	--	--	--	--	--	677	--	8.5
19...	--	--	--	--	--	764	--	12.0
DEC.								
29...	--	--	--	--	--	619	--	2.0
JAN., 1972								
18...	--	--	--	--	--	573	--	2.0
27...	--	--	--	340	--	667	7.7	.5
FEB.								
29...	--	--	--	--	--	634	--	3.0
APR.								
14...	--	--	--	--	--	289	--	15.5
25...	--	--	--	150	--	301	7.6	12.0
JUNE								
22...	--	--	--	290	--	585	8.4	19.5
AUG.								
08...	.14	.44	344	280	120	554	8.4	22.0
03223000 - OLENTANGY RIVER AT CLARIDON, OHIO (LAT 40 34 58 LONG 082 59 20)								
OCT., 1971								
05...	--	--	--	--	--	--	--	21.5
NOV.								
01...	--	--	--	--	--	702	--	15.5
02...	--	--	--	--	--	--	--	13.0
03...	--	--	--	--	--	--	--	13.0
26...	--	--	--	--	--	755	--	2.5
DEC.								
02...	--	--	--	--	--	--	--	1.0
JAN., 1972								
12...	--	--	--	--	--	--	--	3.5
17...	--	--	--	360	--	735	7.9	.0
MAR.								
02...	--	--	--	--	--	--	--	5.5
13...	--	--	--	--	--	604	--	10.0
APR.								
13...	--	--	--	--	--	--	--	--
20...	--	--	--	82	--	184	7.6	12.5
22...	--	--	--	--	--	--	--	11.0
22...	--	--	--	--	--	246	--	11.0
MAY								
01...	--	--	--	--	--	560	--	17.5
JUNE								
23...	--	--	--	320	--	648	7.9	17.0
AUG.								
21...	.34	1.0	354	260	94	551	8.0	21.0
SEP.								
21...	--	--	--	--	--	--	--	19.5
03224500 - WHETSTONE CREEK NEAR ASHLEY, OHIO (LAT 40 27 18 LONG 082 57 28)								
NOV., 1971								
22...	--	--	--	--	--	1370	--	1.0
JAN., 1972								
17...	--	--	--	390	--	954	8.0	.0
MAR.								
13...	--	--	--	270	--	650	8.3	9.0
MAY								
01...	--	--	--	--	--	697	--	17.0
JUNE								
23...	--	--	--	350	--	853	8.5	17.0
AUG.								
21...	--	--	--	--	--	514	--	20.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

SCIOTO RIVER BASIN--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
03225500 - OLENTANGY RIVER NEAR DELAWARE, OHIO (LAT 40 21 18 LONG 083 04 02)									
NOV., 1971									
04...	1255	20	--	--	--	--	--	--	--
JAN., 1972									
05...	1115	660	--	--	81	28	--	4.3	19
13...	1440	422	--	--	--	--	--	--	--
MAR.									
08...	1325	242	--	--	--	--	--	--	--
13...	1010	248	--	--	--	--	--	--	--
APR.									
27...	1615	3950	--	--	37	12	--	3.3	15
JUNE									
26...	1050	35	--	--	70	28	--	4.9	22
AUG.									
10...	1255	44	162	0	45	24	.2	2.8	12
03226800 - OLENTANGY RIVER NEAR WORTHINGTON, OHIO (LAT 40 06 37 LONG 083 01 55)									
OCT., 1971									
20...	1040	--	210	0	120	72	.5	.90	3.9
NOV.									
12...	0930	23	--	--	--	--	--	--	--
JAN., 1972									
10...	1045	448	--	--	85	67	--	4.4	19
APR.									
27...	1200	4050	--	--	42	13	--	3.9	17
JUNE									
27...	1015	43	--	--	98	37	--	3.8	17
AUG.									
11...	1050	49	184	6	81	50	.3	2.1	9.4
03227500 - SCIOTO RIVER AT COLUMBUS, OHIO (LAT 39 54 34 LONG 083 00 33)									
OCT., 1971									
01...	1225	--	220	0	210	65	2.6	.30	1.5
NOV.									
01...	1050	130	--	--	--	--	--	--	--
DEC.									
01...	1030	220	--	--	--	--	--	--	--
JAN., 1972									
03...	1120	3350	--	--	110	36	--	4.5	20
FEB.									
01...	1035	568	--	--	--	--	--	--	--
MAR.									
14...	1200	1570	--	--	--	--	--	--	--
APR.									
03...	1215	822	--	--	--	--	--	--	--
10...	1105	5570	--	--	68	19	--	6.0	27
MAY									
01...	1315	2780	--	--	--	--	--	--	--
JULY									
07...	1602	2190	--	--	74	20	--	7.4	33
AUG.									
01...	1145	220	--	--	--	--	--	--	--
SEP.									
01...	1250	246	138	0	160	54	1.7	7.4	33
03228200 - BIG WALNUT CREEK ABOVE SUNBURY, OHIO (LAT 40 15 04 LONG 082 50 46)									
JUNE, 1972									
07...	0735	--	--	--	71	35	--	.30	1.4
AUG.									
16...	1100	.83	242	0	66	31	.2	.70	3.0
03228500 - BIG WALNUT CREEK AT CENTRAL COLLEGE, OHIO (LAT 40 06 13 LONG 082 53 03)									
OCT., 1971									
20...	1350	--	130	0	59	21	.2	--	3.4
NOV.									
10...	1150	92	--	--	--	--	--	--	--
JAN., 1972									
10...	1520	93	--	--	68	22	--	1.0	4.6
MAR.									
07...	1130	112	--	--	--	--	--	--	--
APR.									
10...	1215	311	--	--	70	26	--	2.8	12
26...	1215	128	--	--	--	--	--	--	--
JUNE									
27...	1450	114	--	--	52	17	--	2.4	10
AUG.									
11...	1600	121	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

SCIOTO RIVER BASIN--Continued

03225500 - OLENTANGY RIVER NEAR DELAWARE, OHIO (LAT 40 21 18 LONG 083 04 02)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 08...	--	--	--	--	--	534	--	11.0
JAN., 1972 05...	--	--	--	240	--	525	7.2	.5
13...	--	--	--	--	--	616	--	4.0
MAR. 08...	--	--	--	--	--	463	--	2.0
13...	--	--	--	--	--	585	--	6.5
APR. 27...	--	--	--	120	--	273	7.6	13.0
JUNE 26...	--	--	--	240	--	512	8.3	19.0
AUG. 10...	.069	.21	274	210	77	431	8.1	24.0

03226800 - OLENTANGY RIVER NEAR WORTHINGTON, OHIO (LAT 40 06 37 LONG 083 01 55)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971 20...	.58	1.8	494	300	130	780	8.0	16.5
NOV. 12...	--	--	--	--	--	766	--	5.5
JAN., 1972 10...	--	--	--	250	--	639	7.2	3.0
APR. 27...	--	--	--	140	--	302	7.9	13.0
JUNE 27...	--	--	--	290	--	631	8.1	20.0
AUG. 11...	.30	.92	394	260	98	606	8.4	19.0

03227500 - SCIOTO RIVER AT COLUMBUS, OHIO (LAT 39 54 34 LONG 083 00 33)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971 01...	3.9	12	526	260	80	935	7.1	20.0
NOV. 01...	--	--	--	--	--	933	--	15.5
DEC. 01...	--	--	--	--	--	902	--	10.0
JAN., 1972 03...	--	--	--	300	--	826	7.4	5.0
FEB. 01...	--	--	--	--	--	775	--	2.5
MAR. 14...	--	--	--	--	--	782	--	9.5
APR. 03...	--	--	--	--	--	630	--	10.0
10...	--	--	--	190	--	426	7.6	8.5
MAY 01...	--	--	--	--	--	493	--	16.0
JULY 07...	--	--	--	230	--	493	7.8	22.0
AUG. 01...	--	--	--	--	--	636	--	25.5
SEP. 01...	--	2.9	466	270	160	748	8.0	27.0

03228200 - BIG WALNUT CREEK ABOVE SUNBURY, OHIO (LAT 40 15 04 LONG 082 50 46)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JUNE, 1972 07...	--	--	--	280	--	587	8.0	17.0
AUG. 16...	.040	.12	346	270	71	566	7.9	20.0

03228500 - BIG WALNUT CREEK AT CENTRAL COLLEGE, OHIO (LAT 40 06 13 LONG 082 53 03)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971 20...	.020	.07	244	170	64	387	8.0	16.5
NOV. 10...	--	--	--	--	--	408	--	10.0
JAN., 1972 10...	--	--	--	180	--	417	8.1	3.0
MAR. 07...	--	--	--	--	--	434	--	4.5
APR. 10...	--	--	--	190	--	434	7.4	8.5
26...	--	--	--	--	--	375	--	13.0
JUNE 27...	--	--	--	150	--	337	7.6	19.0
AUG. 11...	--	--	--	--	--	350	--	21.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SCIOTO RIVER BASIN--Continued									
03228700 - BLACKLICK CREEK NEAR GROVEPORT, OHIO (LAT 39 53 26 LONG 082 51 50)									
AUG., 1972									
15...	1000	7.7	348	0	120	160	.2	1.6	7.3
03228805 - ALUM CREEK AT AFRICA, OHIO (LAT 40 10 56 LONG 082 57 42)									
OCT., 1971									
04...	0920	2.2	--	--	--	--	--	--	--
22...	1025	--	219	0	230	94	.3	--	.3
NOV.									
01...	0920	2.2	--	--	--	--	--	--	--
17...	1250	2.2	--	--	--	--	--	--	--
DEC.									
01...	0830	30	--	--	--	--	--	--	--
06...	1056	34	--	--	--	--	--	--	--
06...	1100	33	--	--	--	--	--	--	--
14...	1400	74	--	--	--	--	--	--	--
JAN., 1972									
11...	0820	234	--	--	--	--	--	--	--
14...	1455	56	--	--	130	64	--	4.4	19
FEB.									
11...	1415	14	--	--	--	--	--	--	--
MAR.									
02...	1515	932	--	--	--	--	--	--	--
07...	1350	79	--	--	--	--	--	--	--
APR.									
26...	1445	108	--	--	--	--	--	--	--
26...	1505	109	--	--	98	38	--	2.6	12
JUNE									
29...	1125	11	--	--	170	76	--	.60	2.5
AUG.									
11...	1315	4.9	222	0	140	110	.3	.50	2.0
03229000 - ALUM CREEK AT COLUMBUS, OHIO (LAT 39 56 42 LONG 082 56 28)									
NOV., 1971									
12...	1305	12	--	--	--	--	--	--	--
DEC.									
07...	1220	326	--	--	91	38	--	2.4	11
JAN., 1972									
04...	1235	260	--	--	--	--	--	--	--
MAR.									
09...	1200	207	--	--	--	--	--	--	--
14...	1400	537	--	--	130	74	--	2.6	12
MAY									
02...	1132	98	--	--	--	--	--	--	--
JUNE									
29...	1420	27	--	--	120	61	--	.30	1.4
AUG.									
14...	1130	12	212	0	97	67	.3	1.3	5.6
03229500 - BIG WALNUT CREEK AT REES, OHIO (LAT 39 51 24 LONG 082 57 26)									
NOV., 1971									
12...	1450	40	--	--	--	--	--	--	--
JAN., 1972									
19...	1035	158	--	--	120	72	--	2.9	13
MAR.									
13...	1535	284	--	--	--	--	--	--	--
APR.									
10...	1520	825	--	--	--	--	--	--	--
13...	1420	5630	--	--	58	22	--	2.4	11
MAY									
04...	1010	245	--	--	--	--	--	--	--
10...	1030	320	--	--	--	--	--	--	--
11...	1015	2140	--	--	--	--	--	--	--
JUNE									
07...	0735	100	--	--	71	35	--	.30	1.4
28...	1445	66	--	--	120	65	--	2.0	9.1
AUG.									
14...	1335	42	242	6	92	61	.2	1.2	5.4
03229800 - WALNUT CREEK NEAR ASHVILLE, OHIO (LAT 39 40 56 LONG 082 58 30)									
AUG., 1972									
11...	1540	41	270	18	76	20	.4	1.5	6.6

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

SCIOTO RIVER BASIN--Continued

03228700 - BLACKLICK CREEK NEAR GROVEPORT, OHIO (LAT 39 53 26 LONG 082 51 50)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972 15...	2.4	7.3	762	410	120	1210	7.6	22.0

03228805 - ALUM CREEK AT AFRICA, OHIO (LAT 40 10 56 LONG 082 57 42)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971 04...	--	--	--	--	--	--	--	21.0
22...	.060	.17	722	440	260	1020	7.6	16.5
NOV. 01...	--	--	--	--	--	--	--	14.5
17...	--	--	--	--	--	1160	--	10.5
DEC. 01...	--	--	--	--	--	--	--	1.0
06...	--	--	--	--	--	818	--	4.5
06...	--	--	--	--	--	--	--	4.5
14...	--	--	--	--	--	--	--	3.0
JAN., 1972 11...	--	--	--	--	--	--	--	8.5
14...	--	--	--	320	--	728	7.7	2.0
FEB. 11...	--	--	--	--	--	1070	--	.0
MAR. 02...	--	--	--	--	--	--	--	3.0
07...	--	--	--	--	--	690	--	5.0
APR. 26...	--	--	--	--	--	--	--	13.0
26...	--	--	--	260	--	585	7.1	13.0
JUNE 29...	--	--	--	370	--	839	8.0	21.0
AUG. 11...	.006	.01	570	370	190	901	8.0	24.0

03229000 - ALUM CREEK AT COLUMBUS, OHIO (LAT 39 56 42 LONG 082 56 28)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 12...	--	--	--	--	--	839	--	9.0
DEC. 07...	--	--	--	190	--	510	7.0	7.5
JAN., 1972 04...	--	--	--	--	--	631	--	4.0
MAR. 09...	--	--	--	--	--	684	--	2.0
14...	--	--	--	300	--	694	8.1	4.0
MAY 02...	--	--	--	--	--	708	--	19.0
JUNE 29...	--	--	--	320	--	764	7.1	21.0
AUG. 14...	.34	1.0	428	280	110	697	7.8	24.0

03229500 - BIG WALNUT CREEK AT REES, OHIO (LAT 39 51 24 LONG 082 57 26)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971 12...	--	--	--	--	--	764	--	7.0
JAN., 1972 19...	--	--	--	360	--	835	7.7	2.0
MAR. 13...	--	--	--	--	--	702	--	6.0
APR. 10...	--	--	--	--	--	509	--	9.5
13...	--	--	--	200	--	423	6.9	13.5
MAY 04...	--	--	--	--	--	678	--	17.5
10...	--	--	--	--	--	324	--	12.5
11...	--	--	--	--	--	398	--	13.5
JUNE 07...	--	--	--	280	--	587	8.0	17.0
28...	--	--	--	380	--	849	7.7	21.0
AUG. 14...	.35	1.1	430	310	100	703	8.5	23.5

03229800 - WALNUT CREEK NEAR ASHVILLE, OHIO (LAT 39 40 56 LONG 082 58 30)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972 11...	.33	1.0	402	330	78	625	8.6	20.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
SCIOTO RIVER BASIN--Continued									
03230500 - BIG DARBY CREEK AT DARBYVILLE, OHIO (LAT 39 42 03 LONG 083 06 35)									
OCT., 1971									
19...	1120	52	--	--	--	--	--	--	--
NOV.									
15...	1030	46	--	--	--	--	--	--	--
19...	1500	45	--	--	--	--	--	--	--
19...	1605	43	--	--	--	--	--	--	--
DEC.									
21...	1045	512	--	--	--	--	--	--	--
JAN., 1972									
18...	1435	374	--	--	--	--	--	--	--
18...	1530	380	--	--	82	27	--	4.6	20
MAR.									
13...	1335	339	--	--	77	28	--	4.3	19
27...	1115	655	--	--	--	--	--	--	--
APR.									
26...	1100	872	--	--	--	--	--	--	--
MAY									
04...	1235	350	--	--	--	--	--	--	--
JUNE									
28...	1110	102	--	--	76	30	--	2.8	12
AUG.									
15...	1050	42	338	0	81	39	.6	.90	4.1
SEP.									
15...	1000	58	--	--	--	--	--	--	--
03230600 - HOMINY CREEK AT CIRCLEVILLE, OHIO (LAT 39 35 26 LONG 082 55 25)									
SEP., 1972									
15...	1000	1.6	190	2	82	15	.3	1.0	4.2
03230800 - DEER CREEK AT MOUNT STERLING, OHIO (LAT 39 42 54 LONG 083 15 26)									
NOV., 1971									
15...	1000	41	--	--	--	--	--	--	--
16...	1050	39	--	--	--	--	--	--	--
16...	1055	39	--	--	--	--	--	--	--
DEC.									
17...	1355	500	--	--	53	19	--	4.4	19
21...	1015	318	--	--	--	--	--	--	--
JAN., 1972									
14...	1120	254	--	--	--	--	--	--	--
MAR.									
03...	1105	660	--	--	--	--	--	--	--
03...	1110	660	--	--	54	22	--	7.2	32
27...	1045	284	--	--	--	--	--	--	--
APR.									
13...	1145	2330	--	--	--	--	--	--	--
26...	1020	311	--	--	--	--	--	--	--
MAY									
01...	1120	166	--	--	--	--	--	--	--
JUNE									
20...	1155	70	--	--	61	21	--	4.1	18
AUG.									
14...	1130	18	294	0	57	20	.5	1.5	6.6
SEP.									
15...	1100	35	--	--	--	--	--	--	--
03230900 - DEER CREEK NEAR PANCOASTBURG, OHIO (LAT 39 37 14 LONG 083 12 47)									
NOV., 1971									
16...	1325	45	--	--	--	--	--	--	--
JAN., 1972									
14...	1515	280	--	--	57	20	--	4.2	18
MAR.									
03...	1435	930	--	--	52	20	--	3.5	15
MAY									
01...	1405	182	--	--	--	--	--	--	--
JUNE									
20...	1455	101	--	--	51	16	--	3.4	15
AUG.									
14...	1405	19	159	4	50	18	.4	1.0	4.6
03231000 - DEER CREEK AT WILLIAMSPORT, OHIO (LAT 39 35 09 LONG 083 07 22)									
JAN., 1972									
25...	1320	288	--	--	63	20	--	3.9	17
MAR.									
13...	1105	218	--	--	61	21	--	4.1	18
MAY									
02...	1110	214	--	--	--	--	--	--	--
JUNE									
21...	1110	136	--	--	55	17	--	3.5	15
AUG.									
15...	1050	22	254	0	60	18	.4	1.6	7.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SCIOTO RIVER BASIN--Continued								
03230500 - BIG DARBY CREEK AT DARBYVILLE, OHIO (LAT 39 42 03 LONG 083 06 35)								
OCT., 1971								
19...	--	--	--	--	--	862	--	16.0
NOV.								
15...	--	--	--	--	--	--	--	12.0
19...	--	--	--	--	--	--	--	10.0
19...	--	--	--	--	--	816	--	10.0
DEC.								
21...	--	--	--	--	--	--	--	5.5
JAN., 1972								
18...	--	--	--	--	--	--	--	2.0
18...	--	--	--	410	--	771	8.2	2.0
MAR.								
13...	--	--	--	370	--	696	7.8	6.0
27...	--	--	--	--	--	--	--	7.5
APR.								
26...	--	--	--	--	--	--	--	11.0
MAY								
04...	--	--	--	--	--	623	--	17.0
JUNE								
28...	--	--	--	280	--	581	8.2	21.0
AUG.								
15...	.12	.38	450	360	82	726	8.2	23.5
SEP.								
15...	--	--	--	--	--	--	--	21.0
03230600 - HOMINY CREEK AT CIRCLEVILLE, OHIO (LAT 39 35 26 LONG 082 55 25)								
SEP., 1972								
15...	.014	.04	294	250	91	493	8.4	16.5
03230800 - DEER CREEK AT MOUNT STERLING, OHIO (LAT 39 42 54 LONG 083 15 26)								
NOV., 1971								
15...	--	--	--	--	--	--	--	12.5
16...	--	--	--	--	--	614	--	10.5
16...	--	--	--	--	--	--	--	10.5
DEC.								
17...	--	--	--	320	--	578	7.9	8.0
21...	--	--	--	--	--	--	--	5.5
JAN., 1972								
14...	--	--	--	--	--	--	--	2.0
MAR.								
03...	--	--	--	--	--	--	--	3.0
03...	--	--	--	290	--	556	8.4	3.0
27...	--	--	--	--	--	--	--	7.5
APR.								
13...	--	--	--	--	--	--	--	16.0
26...	--	--	--	--	--	--	--	11.0
MAY								
01...	--	--	--	--	--	653	--	16.0
JUNE								
20...	--	--	--	360	--	667	8.1	22.5
AUG.								
14...	.21	.65	366	310	68	592	7.9	22.0
SEP.								
15...	--	--	--	--	--	--	--	20.5
03230900 - DEER CREEK NEAR PANCOASTBURG, OHIO (LAT 39 37 14 LONG 083 12 47)								
NOV., 1971								
16...	--	--	--	--	--	576	--	10.5
JAN., 1972								
14...	--	--	--	330	--	612	8.3	2.0
MAR.								
03...	--	--	--	290	--	541	8.5	6.5
MAY								
01...	--	--	--	--	--	541	--	13.0
JUNE								
20...	--	--	--	280	--	531	7.9	20.0
AUG.								
14...	.009	.03	236	200	63	398	8.4	25.0
03231000 - DEER CREEK AT WILLIAMSPORT, OHIO (LAT 39 35 09 LONG 083 07 22)								
JAN., 1972								
25...	--	--	--	350	--	637	8.2	2.0
MAR.								
13...	--	--	--	340	--	636	8.3	10.0
MAY								
02...	--	--	--	--	--	559	--	14.0
JUNE								
21...	--	--	--	310	--	568	8.1	20.0
AUG.								
15...	.036	.11	350	290	82	541	8.1	24.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SCIOTO RIVER BASIN--Continued									
03231300 - KINNIKINNICK CREEK NEAR KINNIKINNICK, OHIO (LAT 39 26 23 LONG 082 58 35)									
SEP., 1972 21...	1200	6.8	312	0	57	7.9	.2	.30	1.4
03232000 - PAINT CREEK NEAR GREENFIELD, OHIO (LAT 39 22 45 LONG 083 22 32)									
NOV., 1971 17...	0945	28	--	--	--	--	--	--	--
DEC. 21...	1200	282	--	--	--	--	--	--	--
JAN., 1972 12...	1155	413	--	--	65	24	--	4.4	20
MAR. 13...	1310	174	--	--	--	--	--	--	--
27...	1300	301	--	--	--	--	--	--	--
APR. 13...	1330	2750	--	--	--	--	--	--	--
13...	1340	2720	--	--	35	12	--	4.9	22
26...	1200	412	--	--	--	--	--	--	--
MAY 02...	1440	182	--	--	--	--	--	--	--
JUNE 22...	0900	127	--	--	61	27	--	8.9	39
AUG. 08...	0950	13	--	--	--	--	--	--	--
15...	1345	12	314	0	100	63	.5	1.4	6.0
SEP. 15...	1135	30	--	--	--	--	--	--	--
15...	1330	27	--	--	--	--	--	--	--
03232300 - RATTLESNAKE CREEK AT CENTERFIELD, OHIO (LAT 39 19 44 LONG 083 28 32)									
NOV., 1971 17...	1210	18	--	--	--	--	--	--	--
DEC. 23...	1130	165	--	--	--	--	--	--	--
JAN., 1972 12...	1450	343	--	--	61	23	--	4.5	20
FEB. 09...	1020	62	--	--	--	--	--	--	--
MAR. 13...	1530	138	--	--	61	22	--	6.0	26
MAY 02...	1645	120	--	--	--	--	--	--	--
JUNE 21...	1725	125	--	--	53	20	--	8.8	39
AUG. 15...	1705	3.5	296	0	51	17	.3	1.0	4.2
SEP. 15...	1320	16	--	--	--	--	--	--	--
03232470 - PAINT C BL PC DAM NR BAINBRIDGE, OHIO (LAT 39 15 08 LONG 083 20 58)									
NOV., 1971 18...	1445	53	--	--	--	--	--	--	--
JAN., 1972 24...	1555	640	--	--	55	20	--	3.6	16
FEB. 09...	1250	180	--	--	--	--	--	--	--
MAR. 14...	1025	430	--	--	--	--	--	--	--
APR. 12...	1700	1090	--	--	--	--	--	--	--
14...	1320	5820	--	--	30	12	--	4.8	21
MAY 23...	1410	395	--	--	--	--	--	--	--
JUNE 02...	1340	415	--	--	55	22	--	8.4	37
22...	1610	305	--	--	--	--	--	--	--
AUG. 17...	1150	25	322	0	59	32	.3	1.3	5.8
SEP. 06...	1120	41	--	--	--	--	--	--	--
03232500 - ROCKY FORK NEAR BARRETTS MILLS, OHIO (LAT 39 13 06 LONG 083 23 08)									
NOV., 1971 22...	1605	32	--	--	--	--	--	--	--
DEC. 29...	1220	48	--	--	36	12	--	1.7	7.6
MAR., 1972 10...	1455	321	--	--	30	12	--	1.8	8.2
MAY 03...	1055	188	--	--	--	--	--	--	--
JUNE 22...	1320	143	--	--	26	9.1	--	.80	3.8
AUG. 16...	1205	15	210	0	23	8.4	.2	.60	2.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SCIOTO RIVER BASIN--Continued								
03231300 - KINNIKINNICK CREEK NEAR KINNIKINNICK, OHIO (LAT 39 26 23 LONG 082 58 35)								
SEP., 1972 21...	.000	.00	328	320	64	684	7.9	17.0
03232000 - PAINT CREEK NEAR GREENFIELD, OHIO (LAT 39 22 45 LONG 083 22 32)								
NOV., 1971 17...	--	--	--	--	--	774	--	10.0
DEC. 21...	--	--	--	--	--	--	--	5.5
JAN., 1972 12...	--	--	--	370	--	680	8.2	4.0
MAR. 13...	--	--	--	--	--	634	--	13.0
27...	--	--	--	--	--	--	--	8.0
APR. 13...	--	--	--	--	--	--	--	16.0
13...	--	--	--	180	--	355	7.9	16.0
26...	--	--	--	--	--	--	--	11.5
MAY 02...	--	--	--	--	--	647	--	18.0
JUNE 22...	--	--	--	330	--	631	8.5	17.5
AUG. 08...	--	--	--	--	--	693	--	19.5
15...	.99	3.0	516	350	92	806	8.2	22.0
SEP. 15...	--	--	--	--	--	722	--	19.0
15...	--	--	--	--	--	--	--	21.5
03232300 - RATTLESNAKE CREEK AT CENTERFIELD, OHIO (LAT 39 19 44 LONG 083 28 32)								
NOV., 1971 17...	--	--	--	--	--	650	--	11.0
DEC. 23...	--	--	--	--	--	677	--	5.0
JAN., 1972 12...	--	--	--	320	--	605	8.1	4.5
FEB. 09...	--	--	--	--	--	747	--	.0
MAR. 13...	--	--	--	330	--	615	8.2	12.5
MAY 02...	--	--	--	--	--	588	--	18.0
JUNE 21...	--	--	--	240	--	473	8.3	18.5
AUG. 15...	.040	.12	340	310	67	567	8.2	25.0
SEP. 15...	--	--	--	--	--	462	--	20.5
03232470 - PAINT C BL PC DAM NR BAINBRIDGE, OHIO (LAT 39 15 08 LONG 083 20 58)								
NOV., 1971 18...	--	--	--	--	--	673	--	12.5
JAN., 1972 24...	--	--	--	310	--	569	8.2	8.0
FEB. 09...	--	--	--	--	--	755	--	.0
MAR. 14...	--	--	--	--	--	639	--	9.5
APR. 12...	--	--	--	--	--	636	--	9.0
14...	--	--	--	160	--	337	7.5	16.5
MAY 23...	--	--	--	--	--	581	--	17.0
JUNE 02...	--	--	--	340	--	642	8.2	11.5
22...	--	--	--	--	--	655	--	17.0
AUG. 17...	.50	1.6	402	330	66	656	8.0	24.5
SEP. 06...	--	--	--	--	--	638	--	18.5
03232500 - ROCKY FORK NEAR BARRETTS MILLS, OHIO (LAT 39 13 06 LONG 083 23 08)								
NOV., 1971 22...	--	--	--	--	--	355	--	7.0
DEC. 29...	--	--	--	250	--	470	8.0	5.0
MAR., 1972 10...	--	--	--	220	--	421	8.5	4.0
MAY 03...	--	--	--	--	--	398	--	15.0
JUNE 22...	--	--	--	190	--	368	8.1	19.0
AUG. 16...	.049	.15	220	200	28	377	7.7	21.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
SCIOTO RIVER BASIN--Continued									
03234000 - PAINT CREEK NEAR BOURNEVILLE, OHIO (LAT 39 15 49 LONG 083 10 01)									
NOV., 1971									
22...	1235	165	--	--	37	16	--	.60	2.6
MAR., 1972									
14...	1355	920	--	--	--	--	--	--	--
APR.									
14...	1645	6600	--	--	31	11	--	.70	3.2
28...	1525	985	--	--	--	--	--	--	--
JUNE									
23...	1300	500	--	--	48	16	--	4.5	20
AUG.									
16...	1525	66	201	7	39	35	.2	.80	3.4
SEP.									
06...	1330	67	--	--	--	--	--	--	--
03234080 - NORTH FORK PAINT CREEK NEAR FRANKFORT,OHIO (LAT 39 26 11 LONG 083 13 22)									
SEP., 1972									
11...	1345	5.6	196	0	68	15	.5	1.2	5.4
03235000 - SALT CREEK AT TARLTON, OHIO (LAT 39 33 20 LONG 082 46 51)									
AUG., 1972									
10...	1440	.22	262	0	61	20	.2	.00	.0
03235100 - SALT CREEK AT LAURELVILLE, OHIO (LAT 39 27 46 LONG 082 44 08)									
AUG., 1972									
10...	1600	6.1	204	6	32	9.6	.2	.20	.9
03235500 - TAR HOLLOW C AT T H STATE PARK OH (LAT 39 23 22 LONG 082 45 03)									
DEC., 1971									
02...	1430	.12	--	--	24	1.7	--	.40	2.0
07...	1300	8.9	--	--	--	--	--	--	--
FEB., 1972									
29...	1510	2.1	--	--	25	2.2	--	.50	2.2
MAY									
11...	1405	2.8	--	--	31	1.6	--	.20	.9
SEP.									
15...	1230	.25	40	0	26	4.2	.0	.80	3.5
03237130 - SCIOTO BRUSH CREEK AT OTWAY, OHIO (LAT 38 51 43 LONG 083 11 24)									
SEP., 1972									
12...	0810	.41	144	0	63	12	.2	.20	.9
03237150 - S F SCIOTO BRUSH C AT WAMSLEY OH (LAT 38 49 54 LONG 083 16 42)									
SEP., 1972									
12...	0900	.35	124	2	33	4.9	.2	.30	1.2
OHIO BRUSH CREEK BASIN									
03237295 - OHIO BRUSH CREEK NEAR PEEBLES, OHIO (LAT 38 58 06 LONG 083 25 34)									
SEP., 1972									
12...	1000	1.5	174	6	22	5.3	.2	.30	1.2
03237400 - WEST FORK OHIO BRUSH CREEK AT LAWSHE, OHIO (LAT 38 56 22 LONG 083 28 28)									
SEP., 1972									
12...	1045	.15	188	0	42	11	.2	.40	1.6
03237500 - OHIO BRUSH CREEK NEAR WEST UNION, OHIO (LAT 38 48 13 LONG 083 25 16)									
NOV., 1971									
23...	1100	39	--	--	--	--	--	--	--
DEC.									
07...	1600	7210	--	--	--	--	--	--	--
JAN., 1972									
11...	1505	758	--	--	37	7.8	--	1.5	6.6
11...	1510	758	--	--	--	--	--	--	--
MAR.									
16...	1220	460	--	--	42	9.5	--	1.0	4.2
APR.									
22...	1745	3010	--	--	--	--	--	--	--
28...	0955	308	--	--	38	6.2	--	1.1	4.9
JUNE									
16...	1350	1130	--	--	--	--	--	--	--
AUG.									
08...	1400	19	--	--	--	--	--	--	--
18...	1010	5.0	196	6	32	9.3	.2	.00	.0
SEP.									
18...	1330	3.2	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SCIOTO RIVER BASIN--Continued								
03234000 - PAINT CREEK NEAR BOURNEVILLE, OHIO (LAT 39 15 49 LONG 083 10 01)								
NOV., 1971 22...	--	--	--	260	--	491	8.3	7.5
MAR., 1972 14...	--	--	--	--	--	462	--	8.5
APR. 14...	--	--	--	170	--	355	7.2	17.0
28...	--	--	--	--	--	573	--	13.5
JUNE 23...	--	--	--	310	--	573	8.5	16.0
AUG. 16...	.038	.12	268	230	54	440	8.5	28.0
SEP. 06...	--	--	--	--	--	511	--	20.5
03234080 - NORTH FORK PAINT CREEK NEAR FRANKFORT,OHIO (LAT 39 26 11 LONG 083 13 22)								
SEP., 1972 11...	.015	.04	278	250	90	479	7.7	22.0
03235000 - SALT CREEK AT TARLTON, OHIO (LAT 39 33 20 LONG 082 46 51)								
AUG., 1972 10...	.013	.04	356	270	55	559	8.0	25.0
03235100 - SALT CREEK AT LAURELVILLE, OHIO (LAT 39 27 46 LONG 082 44 08)								
AUG., 1972 10...	.096	.30	272	200	23	402	8.5	25.0
03235500 - TAR HOLLOW C AT T H STATE PARK OH (LAT 39 23 22 LONG 082 45 03)								
DEC., 1971 02...	--	--	--	32	--	89	6.5	10.0
07...	--	--	--	--	--	941	--	10.0
FEB., 1972 29...	--	--	--	33	--	95	6.9	--
MAY 11...	--	--	--	35	--	96	7.2	15.0
SEP. 15...	.013	.04	88	52	19	141	7.3	18.0
03237130 - SCIOTO BRUSH CREEK AT OTWAY, OHIO (LAT 38 51 43 LONG 083 11 24)								
SEP., 1972 12...	.020	.06	264	180	62	375	7.8	18.5
03237150 - S F SCIOTO BRUSH C AT WAMSLEY OH (LAT 38 49 54 LONG 083 16 42)								
SEP., 1972 12...	.022	.07	174	140	35	276	8.3	19.5
OHIO BRUSH CREEK BASIN								
03237295 - OHIO BRUSH CREEK NEAR PEEBLES, OHIO (LAT 38 58 06 LONG 083 25 34)								
SEP., 1972 12...	.017	.05	192	170	18	333	8.4	20.0
03237400 - WEST FORK OHIO BRUSH CREEK AT LAWSHE, OHIO (LAT 38 56 22 LONG 083 28 28)								
SEP., 1972 12...	.057	.18	240	200	46	396	8.0	21.5
03237500 - OHIO BRUSH CREEK NEAR WEST UNION, OHIO (LAT 38 48 13 LONG 083 25 16)								
NOV., 1971 23...	--	--	--	--	--	523	--	4.0
DEC. 07...	--	--	--	--	--	--	--	12.0
JAN., 1972 11...	--	--	--	200	--	379	7.9	6.0
11...	--	--	--	--	--	--	--	6.0
MAR. 16...	--	--	--	230	--	428	8.4	9.0
APR. 22...	--	--	--	--	--	--	--	14.0
28...	--	--	--	250	--	459	8.3	11.0
JUNE 16...	--	--	--	--	--	--	--	22.0
AUG. 08...	--	--	--	--	--	424	--	23.5
18...	.040	.12	224	200	30	393	8.4	26.0
SEP. 18...	--	--	--	--	--	--	--	22.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

EAGLE CREEK BASIN

03238200 - EAGLE CREEK NEAR RIPLEY, OHIO (LAT 38 43 35 LONG 083 47 15)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
08...	1645	1.7	158	0	27	8.6	.2	.30	1.2

WHITEOAK CREEK BASIN

03238500 - WHITEOAK CREEK NEAR GEORGETOWN, OHIO (LAT 38 50 42 LONG 083 55 16)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
12...	1600	24	--	--	--	--	--	--	--
NOV.									
12...	1000	20	--	--	--	--	--	--	--
12...	1005	20	--	--	--	--	--	--	--
30...	1700	588	--	--	--	--	--	--	--
DEC.									
07...	1745	4720	--	--	--	--	--	--	--
08...	0915	1610	--	--	--	--	--	--	--
JAN., 1972									
11...	1050	436	--	--	--	--	--	--	--
11...	1110	436	--	--	46	14	--	1.8	7.8
13...	1715	152	--	--	--	--	--	--	--
FEB.									
18...	1130	958	--	--	--	--	--	--	--
MAR.									
02...	1000	1910	--	--	--	--	--	--	--
02...	1030	2010	--	--	53	16	--	2.4	10
APR.									
05...	1215	465	--	--	--	--	--	--	--
27...	1055	95	--	--	--	--	--	--	--
27...	1655	101	--	--	--	--	--	--	--
MAY									
12...	0800	92	--	--	--	--	--	--	--
JUNE									
16...	0940	1660	--	--	--	--	--	--	--
16...	1500	2230	--	--	--	--	--	--	--
AUG.									
02...	1315	3.5	--	--	--	--	--	--	--
18...	1315	1.7	188	4	50	25	.2	.70	2.9
18...	1330	210	--	--	--	--	--	--	--
SEP.									
18...	1445	.17	--	--	--	--	--	--	--

LITTLE MIAMI RIVER BASIN

03239000 - LITTLE MIAMI RIVER NEAR SELMA, OHIO (LAT 39 46 36 LONG 083 44 21)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
03...	1505	6.4	298	0	74	24	.4	1.0	4.6

03239500 - N F L MIAMI R NR PITCHIN OH (LAT 39 49 40 LONG 083 46 38)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
03...	1315	4.8	186	0	79	21	.2	.00	.0

03240000 - LITTLE MIAMI RIVER NEAR OLDTOWN, OHIO (LAT 39 44 54 LONG 083 55 53)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
12...	1405	22	--	--	--	--	--	--	--
JAN., 1972									
11...	1340	189	--	--	65	24	--	4.6	20
MAR.									
01...	1115	110	--	--	--	--	--	--	--
APR.									
13...	1020	661	--	--	45	16	--	4.6	20
20...	1315	251	--	--	--	--	--	--	--
JUNE									
08...	1700	66	--	--	72	23	--	2.8	12
AUG.									
02...	1050	26	--	--	--	--	--	--	--
SEP.									
20...	1420	18	322	0	67	29	.3	1.9	8.4

03241500 - MASSIES CREEK AT WILBERFORCE, OHIO (LAT 39 43 22 LONG 083 52 58)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
15...	1135	18	--	--	--	--	--	--	--
JAN., 1972									
11...	1530	112	--	--	61	24	--	4.8	21
MAR.									
01...	1400	78	--	--	--	--	--	--	--
APR.									
18...	1000	239	--	--	50	19	--	6.7	30
JUNE									
13...	1400	73	--	--	56	24	--	2.9	13
AUG.									
28...	1205	9.3	292	10	72	27	.3	1.3	5.9

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

EAGLE CREEK BASIN

03238200 - EAGLE CREEK NEAR RIPLEY, OHIO (LAT 38 43 35 LONG 083 47 15)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972								
08...	.020	.06	186	160	30	317	8.2	28.0

WHITEOAK CREEK BASIN

03238500 - WHITEOAK CREEK NEAR GEORGETOWN, OHIO (LAT 38 50 42 LONG 083 55 16)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971								
12...	--	--	--	--	--	--	--	17.0
NOV.								
12...	--	--	--	--	--	582	--	5.5
12...	--	--	--	--	--	--	--	5.5
30...	--	--	--	--	--	--	--	6.0
DEC.								
07...	--	--	--	--	--	--	--	10.5
08...	--	--	--	--	--	--	--	11.0
JAN., 1972								
11...	--	--	--	--	--	--	--	6.0
11...	--	--	--	150	--	323	8.0	6.0
13...	--	--	--	--	--	--	--	5.5
FEB.								
18...	--	--	--	--	--	--	--	9.0
MAR.								
02...	--	--	--	--	--	--	--	9.0
02...	--	--	--	180	--	382	8.2	9.5
APR.								
05...	--	--	--	--	--	--	--	10.0
27...	--	--	--	--	--	--	--	16.0
27...	--	--	--	--	--	447	--	16.0
MAY								
12...	--	--	--	--	--	--	--	14.5
JUNE								
16...	--	--	--	--	--	--	--	21.0
16...	--	--	--	--	--	--	--	17.0
AUG.								
02...	--	--	--	--	--	409	--	26.5
18...	.88	2.7	260	200	40	456	8.4	31.0
18...	--	--	--	--	--	--	--	31.0
SEP.								
18...	--	--	--	--	--	--	--	22.0

LITTLE MIAMI RIVER BASIN

03239000 - LITTLE MIAMI RIVER NEAR SELMA, OHIO (LAT 39 48 36 LONG 083 44 21)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972								
03...	.086	.26	388	340	96	656	8.2	23.0

03239500 - N F L MIAMI R NR PITCHIN OH (LAT 39 49 40 LONG 083 46 38)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972								
03...	.047	.14	302	270	120	496	8.4	22.0

03240000 - LITTLE MIAMI RIVER NEAR OLDTOWN, OHIO (LAT 39 44 54 LONG 083 55 53)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
12...	--	--	--	--	--	666	--	8.0
JAN., 1972								
11...	--	--	--	350	--	650	8.3	6.0
MAR.								
01...	--	--	--	--	--	693	--	8.5
APR.								
13...	--	--	--	230	--	460	7.8	15.5
20...	--	--	--	--	--	673	--	13.5
JUNE								
08...	--	--	--	370	--	680	8.4	17.0
AUG.								
02...	--	--	--	--	--	679	--	20.5
SEP.								
20...	.30	.93	430	360	96	671	8.1	19.0

03241500 - MASSIES CREEK AT WILBERFORCE, OHIO (LAT 39 43 22 LONG 083 52 58)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
15...	--	--	--	--	--	737	--	13.0
JAN., 1972								
11...	--	--	--	370	--	677	8.1	6.5
MAR.								
01...	--	--	--	--	--	631	--	10.5
APR.								
18...	--	--	--	300	--	545	8.3	13.5
JUNE								
13...	--	--	--	290	--	551	8.6	17.0
AUG.								
28...	.073	.22	420	350	94	655	8.4	19.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

LITTLE MIAMI RIVER BASIN--Continued

03242150 - CAESAR CREEK NEAR XENIA, OHIO (LAT 39 37 25 LONG 083 54 09)

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
12...	1130	22	--	--	--	--	--	--	--
JAN., 1972									
07...	1450	87	--	--	52	35	--	4.1	18
MAR.									
01...	0935	78	--	--	--	--	--	--	--
APR.									
13...	1310	1240	--	--	35	16	--	4.8	21
JUNE									
13...	1100	18	--	--	47	21	--	2.7	12
AUG.									
02...	0855	2.9	--	--	--	--	--	--	--
25...	1125	8.6	--	--	--	--	--	--	--
29...	1210	2.6	224	10	39	28	.2	1.2	5.1
SEP.									
28...	1440	33	--	--	--	--	--	--	--

03242200 - ANDERSON FORK NEAR NEW BURLINGTON, OHIO (LAT 39 33 59 LONG 083 54 10)

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
11...	1530	10	--	--	--	--	--	--	--
JAN., 1972									
05...	1135	167	--	--	57	27	--	4.7	21
FEB.									
29...	1605	78	--	--	--	--	--	--	--
APR.									
14...	1110	914	--	--	28	11	--	4.3	19
JUNE									
09...	1400	23	--	--	54	23	--	4.4	19
AUG.									
01...	1430	2.4	--	--	--	--	--	--	--
SEP.									
21...	1405	.66	208	4	57	33	.2	.90	4.0

03242350 - CAESAR CREEK NEAR WELLMAN, OHIO (LAT 39 28 57 LONG 084 03 52)

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
11...	1055	36	--	--	44	22	--	.90	4.1
FEB., 1972									
29...	1000	202	--	--	--	--	--	--	--
APR.									
25...	1140	380	--	--	52	21	--	6.7	30
JUNE									
08...	--	74	--	--	53	21	--	3.5	16
AUG.									
10...	1320	5.1	228	0	47	21	.2	.60	2.6
SEP.									
20...	1650	6.2	--	--	--	--	--	--	--

03244000 - TODD FORK NEAR ROACHESTER, OHIO (LAT 39 20 07 LONG 084 05 12)

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
08...	1325	24	--	--	--	--	--	--	--
JAN., 1972									
03...	1210	320	--	--	50	24	--	3.8	17
FEB.									
29...	1145	900	--	--	--	--	--	--	--
APR.									
14...	1335	1500	--	--	40	18	--	4.4	20
25...	1440	305	--	--	--	--	--	--	--
JUNE									
12...	1620	41	--	--	51	25	--	2.8	12
AUG.									
10...	1615	5.1	244	0	47	28	.2	1.0	4.2
SEP.									
21...	1725	6.6	--	--	--	--	--	--	--

03245500 - LITTLE MIAMI RIVER AT MILFORD, OHIO (LAT 39 10 17 LONG 084 17 53)

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
09...	1225	236	--	--	--	--	--	--	--
JAN., 1972									
10...	1250	3210	--	--	53	26	--	3.7	16
FEB.									
28...	1620	1260	--	--	--	--	--	--	--
APR.									
26...	1100	1820	--	--	55	18	--	4.6	20
JUNE									
13...	0957	380	--	--	60	40	--	2.8	12
AUG.									
22...	1555	122	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
LITTLE MIAMI RIVER BASIN--Continued								
03242150 - CAESAR CREEK NEAR XENIA, OHIO (LAT 39 37 25 LONG 083 54 09)								
NOV., 1971 12...	--	--	--	--	--	456	--	8.0
JAN., 1972 07...	--	--	--	300	--	573	8.2	1.5
MAR. 01...	--	--	--	--	--	644	--	8.0
APR. 13...	--	--	--	190	--	381	8.0	16.0
JUNE 13...	--	--	--	280	--	530	8.4	17.0
AUG. 02...	--	--	--	--	--	430	--	21.0
25...	--	--	--	--	--	470	--	22.0
29...	.14	.43	268	250	50	475	8.6	21.0
SEP. 28...	--	--	--	--	--	558	--	18.5
03242200 - ANDERSON FORK NEAR NEW BURLINGTON, OHIO (LAT 39 33 59 LONG 083 54 10)								
NOV., 1971 11...	--	--	--	--	--	675	--	7.0
JAN., 1972 05...	--	--	--	360	--	679	8.0	2.0
FEB. 29...	--	--	--	--	--	613	--	10.5
APR. 14...	--	--	--	160	--	315	7.1	15.0
JUNE 09...	--	--	--	240	--	478	8.1	18.0
AUG. 01...	--	--	--	--	--	530	--	23.5
SEP. 21...	.020	.06	302	250	73	525	8.5	21.0
03242350 - CAESAR CREEK NEAR WELLMAN, OHIO (LAT 39 28 57 LONG 084 03 52)								
NOV., 1971 11...	--	--	--	280	--	513	8.2	4.0
FEB., 1972 29...	--	--	--	--	--	531	--	5.0
APR. 25...	--	--	--	330	--	622	7.8	11.5
JUNE 08...	--	--	--	270	--	507	8.3	17.5
AUG. 10...	.002	.01	256	250	63	479	8.0	22.0
SEP. 20...	--	--	--	--	--	483	--	22.0
03244000 - TODD FORK NEAR ROACHESTER, OHIO (LAT 39 20 07 LONG 084 05 12)								
NOV., 1971 08...	--	--	--	--	--	598	--	6.0
JAN., 1972 03...	--	--	--	280	--	665	7.9	3.0
FEB. 29...	--	--	--	--	--	558	--	4.0
APR. 14...	--	--	--	220	--	434	8.1	15.0
25...	--	--	--	--	--	552	--	13.5
JUNE 12...	--	--	--	310	--	597	8.2	21.5
AUG. 10...	.14	.44	316	260	60	530	8.0	25.0
SEP. 21...	--	--	--	--	--	425	--	23.5
03245500 - LITTLE MIAMI RIVER AT MILFORD, OHIO (LAT 39 10 17 LONG 084 17 53)								
NOV., 1971 09...	--	--	--	--	--	684	--	6.0
JAN., 1972 10...	--	--	--	270	--	551	7.7	5.5
FEB. 28...	--	--	--	--	--	620	--	7.5
APR. 26...	--	--	--	260	--	521	8.3	13.0
JUNE 13...	--	--	--	360	--	720	8.3	21.0
AUG. 22...	--	--	--	--	--	612	--	29.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE OHIO RIVER BASIN

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

LITTLE MIAMI RIVER BASIN--Continued

03246200 - E F L MIAMI R NR MARATHON OH (LAT 39 06 52 LONG 084 01 29)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
13...	1215	26	--	--	--	--	--	--	--
NOV.									
11...	1040	25	--	--	42	28	--	.40	1.8
30...	1600	404	--	--	--	--	--	--	--
JAN., 1972									
05...	1320	1300	--	--	--	--	--	--	--
14...	1300	245	--	--	--	--	--	--	--
FEB.									
17...	1415	528	--	--	--	--	--	--	--
MAR.									
01...	1140	280	--	--	--	--	--	--	--
01...	1145	280	--	--	53	21	--	3.0	13
APR.									
05...	1000	386	--	--	--	--	--	--	--
27...	0940	97	--	--	--	--	--	--	--
MAY									
11...	1145	192	--	--	--	--	--	--	--
JUNE									
15...	1025	196	--	--	27	9.2	--	4.8	21
AUG.									
23...	0955	3.7	148	4	33	15	.2	.80	3.8
SEP.									
18...	1600	6.9	--	--	--	--	--	--	--

03247050 - E F L MIAMI RIVER NEAR BATAVIA OH (LAT 39 03 36 LONG 084 10 32)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
JAN., 1972									
10...	1600	1500	--	--	44	16	--	2.2	9.6
MAR.									
01...	1530	472	--	--	53	18	--	2.2	9.5
APR.									
12...	1250	322	--	--	--	--	--	--	--
27...	1220	179	--	--	45	15	--	1.1	5.0
AUG.									
11...	1355	18	--	--	--	--	--	--	--
SEP.									
21...	1445	7.3	180	0	34	23	.2	.50	2.3

03247400 - SHAYLER RUN NEAR PERINTOWN, OHIO (LAT 39 06 46 LONG 084 13 24)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
10...	1035	2.9	--	--	--	--	--	--	--
JAN., 1972									
04...	0950	26	--	--	68	20	--	1.4	6.1
FEB.									
29...	1035	14	--	--	--	--	--	--	--
APR.									
26...	1610	7.9	--	--	71	25	--	.90	4.1
JUNE									
13...	1400	.72	--	--	110	55	--	2.9	13
AUG.									
22...	1110	.78	211	0	140	85	.1	8.7	39

03247500 - E F L MIAMI R AT PERINTOWN, OH (LAT 39 08 13 LONG 084 14 17)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
JAN., 1972									
04...	1235	730	--	--	49	19	--	1.6	7.1
FEB.									
29...	1415	628	--	--	--	--	--	--	--
APR.									
26...	1400	312	--	--	43	12	--	1.5	6.6
JUNE									
13...	1740	48	--	--	51	28	--	2.1	9.2
AUG.									
22...	1330	11	184	0	38	19	.2	.70	2.9

MILL CREEK BASIN

03255500 - MILL CREEK AT READING, OHIO (LAT 39 13 14 LONG 084 26 49)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
10...	1325	16	--	--	--	--	--	--	--
JAN., 1972									
10...	1335	114	--	--	87	58	--	2.1	9.2
FEB.									
28...	1420	51	--	--	--	--	--	--	--
APR.									
08...	1500	279	--	--	70	45	--	1.9	8.2
12...	0845	89	--	--	--	--	--	--	--
JUNE									
14...	1230	22	--	--	80	47	--	2.0	8.6
JULY									
31...	1545	12	--	--	--	--	--	--	--
SEP.									
27...	1520	55	144	0	70	43	.3	1.3	5.8

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

LITTLE MIAMI RIVER BASIN--Continued

03246200 - E F L MIAMI R NR MARATHON OH (LAT 39 06 52 LONG 084 01 29)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT., 1971 13...	--	--	--	--	--	--	--	14.0
NOV. 11...	--	--	--	280	--	531	7.9	5.0
30...	--	--	--	--	--	--	--	5.0
JAN., 1972 05...	--	--	--	--	--	--	--	4.5
14...	--	--	--	--	--	--	--	4.0
FEB. 17...	--	--	--	--	--	--	--	3.0
MAR. 01...	--	--	--	--	--	--	--	9.0
01...	--	--	--	180	--	385	8.0	9.0
APR. 05...	--	--	--	--	--	--	--	8.0
27...	--	--	--	--	--	497	--	12.5
MAY 11...	--	--	--	--	--	--	--	14.0
JUNE 15...	--	--	--	110	--	233	7.8	21.0
AUG. 23...	.095	.29	250	170	42	355	8.4	24.0
SEP. 10...	--	--	--	--	--	--	--	23.5

03247050 - E F L MIAMI RIVER NEAR BATAVIA OH (LAT 39 03 30 LONG 084 10 32)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JAN., 1972 10...	--	--	--	160	--	348	7.4	5.5
MAR. 01...	--	--	--	210	--	431	8.1	10.0
APR. 12...	--	--	--	--	--	405	--	13.0
27...	--	--	--	210	--	397	7.9	14.0
AUG. 11...	--	--	--	--	--	324	--	25.5
SEP. 21...	.059	.18	226	180	32	335	7.8	23.0

03247400 - SHAYLER RUN NEAR PERINTOWN, OHIO (LAT 39 06 46 LONG 084 13 24)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971 10...	--	--	--	--	--	599	--	5.0
JAN., 1972 04...	--	--	--	230	--	480	8.5	5.5
FEB. 29...	--	--	--	--	--	563	--	5.5
APR. 26...	--	--	--	250	--	529	8.6	16.5
JUNE 13...	--	--	--	320	--	773	8.0	20.0
AUG. 22...	2.6	8.0	574	290	100	918	8.4	22.0

03247500 - E F L MIAMI R AT PERINTOWN, OH (LAT 39 08 13 LONG 084 14 17)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JAN., 1972 04...	--	--	--	200	--	403	7.6	4.5
FEB. 29...	--	--	--	--	--	399	--	8.0
APR. 26...	--	--	--	220	--	433	7.9	14.0
JUNE 13...	--	--	--	260	--	511	7.9	21.5
AUG. 22...	.073	.22	270	210	46	432	8.5	26.0

MILL CREEK BASIN

03255500 - MILL CREEK AT READING, OHIO (LAT 39 13 14 LONG 084 26 49)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971 10...	--	--	--	--	--	789	--	12.0
JAN., 1972 10...	--	--	--	350	--	755	7.3	7.5
FEB. 28...	--	--	--	--	--	794	--	9.0
APR. 08...	--	--	--	270	--	608	7.2	8.0
12...	--	--	--	--	--	750	--	14.0
JUNE 14...	--	--	--	270	--	615	7.8	18.0
JULY 31...	--	--	--	--	--	641	--	27.0
SEP. 27...	.28	.86	298	200	82	505	7.7	22.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MILL CREEK BASIN--Continued

03257500 - WEST FORK MILL CREEK AT WOODLAWN, OHIO (LAT 39 15 14 LONG 084 28 13)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
10...	1015	12	--	--	--	--	--	--	--
JAN., 1972									
10...	1255	37	--	--	62	96	--	1.6	6.9
FEB.									
28...	1205	27	--	--	--	--	--	--	--
APR.									
08...	1720	184	--	--	47	40	--	1.8	7.7
12...	1345	24	--	--	--	--	--	--	--
JUNE									
15...	1200	3.4	--	--	46	30	--	.80	3.6
SEP.									
27...	1320	12	112	0	37	24	.2	.60	2.5

03259000 - MILL CREEK AT CARTHAGE, OHIO (LAT 39 12 07 LONG 084 28 16)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
NOV., 1971									
10...	1540	34	--	--	--	--	--	--	--
JAN., 1972									
10...	1715	146	--	--	78	71	--	2.3	10
FEB.									
28...	1625	75	--	--	--	--	--	--	--
APR.									
12...	1110	109	--	--	79	54	--	1.7	7.5
JUNE									
15...	1430	20	--	--	85	49	--	.05	.2
AUG.									
01...	0915	13	174	6	110	55	.3	.80	3.7
SEP.									
27...	1600	86	--	--	--	--	--	--	--

GREAT MIAMI RIVER BASIN

03260620 - MUCHINIPPI CREEK NEAR RUSSELLS POINT, OHIO (LAT 40 26 21 LONG 083 56 28)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
22...	1220	3.8	298	0	100	30	.5	.90	3.8

03260700 - BOKENGEHALAS CREEK NEAR DEGRAFF, OHIO (LAT 40 20 50 LONG 083 53 28)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
22...	1110	10	358	0	89	100	3.0	1.9	8.4

03260800 - STONY CREEK NEAR DEGRAFF, OHIO (LAT 40 17 27 LONG 083 54 36)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
22...	0945	18	360	0	63	7.7	.5	.50	2.2

03262000 - LORAMIE CREEK AT LOCKINGTON, OHIO (LAT 40 12 35 LONG 084 14 32)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
07...	0920	8.5	203	4	110	37	.4	1.3	5.8

03262650 - SPRING CREEK NEAR TROY, OHIO (LAT 40 05 18 LONG 084 10 27)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
02...	1300	.24	290	0	53	18	.3	1.2	5.1

03262700 - GREAT MIAMI RIVER AT TROY, OHIO (LAT 40 02 25 LONG 084 11 52)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
29...	1500	86	--	--	--	--	--	--	--
NOV.									
18...	1545	84	--	--	--	--	--	--	--
DEC.									
09...	1200	868	--	--	--	--	--	--	--
27...	1140	616	--	--	--	--	--	--	--
MAR., 1972									
16...	1200	1470	--	--	--	--	--	--	--
23...	1500	1240	--	--	--	--	--	--	--
APR.									
08...	1140	7040	--	--	--	--	--	--	--
22...	1420	9900	--	--	--	--	--	--	--
MAY									
03...	1600	666	--	--	--	--	--	--	--
JUNE									
06...	1205	418	--	--	--	--	--	--	--
26...	1000	384	--	--	--	--	--	--	--
SEP.									
06...	0950	75	314	0	91	37	.8	2.6	11
19...	1245	147	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MILL CREEK BASIN--Continued

03257500 - WEST FORK MILL CREEK AT WOODLAWN, OHIO (LAT 39 15 14 LONG 084 28 13)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
10...	--	--	--	--	--	747	--	13.0
JAN., 1972								
10...	--	--	--	210	--	686	7.5	4.0
FEB.								
28...	--	--	--	--	--	1290	--	4.0
APR.								
08...	--	--	--	170	--	451	7.1	8.0
12...	--	--	--	--	--	469	--	12.0
JUNE								
15...	--	--	--	210	--	462	8.4	18.0
SEP.								
27...	.10	.32	204	120	28	315	7.7	21.0

03259000 - MILL CREEK AT CARTHAGE, OHIO (LAT 39 12 07 LONG 084 28 16)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV., 1971								
10...	--	--	--	--	--	782	--	12.0
JAN., 1972								
10...	--	--	--	300	--	725	8.3	4.0
FEB.								
28...	--	--	--	--	--	988	--	9.0
APR.								
12...	--	--	--	310	--	677	8.5	14.5
JUNE								
15...	--	--	--	290	--	641	7.7	18.0
AUG.								
01...	.022	.07	404	250	98	646	8.4	24.0
SEP.								
27...	--	--	--	--	--	367	--	22.0

GREAT MIAMI RIVER BASIN

03260620 - MUCHINIPPI CREEK NEAR RUSSELLS POINT, OHIO (LAT 40 26 21 LONG 083 56 28)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
22...	.22	.69	434	360	120	708	8.1	15.5

03260700 - BOKENGEHALAS CREEK NEAR DEGRAFF, OHIO (LAT 40 20 50 LONG 083 53 28)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
22...	.78	2.4	598	440	150	983	8.0	14.5

03260800 - STONY CREEK NEAR DEGRAFF, OHIO (LAT 40 17 27 LONG 083 54 36)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
22...	.018	.06	404	380	84	657	8.2	13.0

03262000 - LORAMIE CREEK AT LOCKINGTON, OHIO (LAT 40 12 35 LONG 084 14 32)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
07...	.062	.19	400	290	120	650	8.3	16.0

03262650 - SPRING CREEK NEAR TROY, OHIO (LAT 40 05 18 LONG 084 10 27)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972								
02...	.017	.05	352	320	68	589	8.4	22.0

03262700 - GREAT MIAMI RIVER AT TROY, OHIO (LAT 40 02 25 LONG 084 11 52)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971								
29...	--	--	--	--	--	--	--	18.0
NOV.								
18...	--	--	--	--	--	--	--	14.0
DEC.								
09...	--	--	--	--	--	--	--	7.0
27...	--	--	--	--	--	--	--	7.5
MAR., 1972								
16...	--	--	--	--	--	--	--	5.5
23...	--	--	--	--	--	--	--	5.0
APR.								
08...	--	--	--	--	--	--	--	2.0
22...	--	--	--	--	--	--	--	10.5
MAY								
03...	--	--	--	--	--	--	--	18.0
JUNE								
06...	--	--	--	--	--	--	--	22.5
26...	--	--	--	--	--	--	--	17.5
SEP.								
06...	.78	2.4	438	360	100	737	8.1	21.5
19...	--	--	--	--	--	--	--	23.5

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE OHIO RIVER BASIN

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
GREAT MIAMI RIVER BASIN--Continued									
03262900 - HONEY CREEK NEAR NEW CARLISLE, OHIO (LAT 39 58 11 LONG 084 06 33)									
AUG., 1972									
02...	1345	12	316	14	54	40	.3	1.0	4.2
03264000 - GREENVILLE CREEK NEAR BRADFORD, OHIO (LAT 40 06 08 LONG 084 25 48)									
OCT., 1971									
29...	1205	28	--	--	--	--	--	--	--
NOV.									
14...	1340	23	--	--	--	--	--	--	--
DEC.									
22...	1155	114	--	--	--	--	--	--	--
JAN., 1972									
24...	1135	185	--	--	--	--	--	--	--
MAR.									
16...	1520	182	--	--	--	--	--	--	--
APR.									
17...	1015	1370	--	--	--	--	--	--	--
MAY									
04...	1430	145	--	--	--	--	--	--	--
JUNE									
15...	1110	591	--	--	--	--	--	--	--
SEP.									
06...	1600	20	312	0	79	23	.4	.90	3.8
19...	1500	19	--	--	--	--	--	--	--
03266500 - MAD RIVER AT ZANESFIELD, OHIO (LAT 40 21 01 LONG 083 40 28)									
OCT., 1971									
16...	1110	1.4	--	--	--	--	--	--	--
NOV.									
22...	1215	1.4	--	--	--	--	--	--	--
JAN., 1972									
11...	1120	8.6	--	--	60	14	--	2.8	12
MAR.									
06...	1155	8.0	--	--	--	--	--	--	--
APR.									
17...	1400	30	--	--	41	8.8	--	1.2	5.4
MAY									
16...	1010	52	--	--	--	--	--	--	--
JUNE									
19...	1317	5.2	--	--	42	11	--	1.0	4.5
AUG.									
07...	1125	4.1	222	4	39	9.1	.2	1.0	4.6
03267000 - MAD RIVER NEAR URBANA, OHIO (LAT 40 06 27 LONG 083 47 57)									
NOV., 1971									
04...	1000	49	--	--	--	--	--	--	--
17...	1450	46	--	--	--	--	--	--	--
DEC.									
07...	1400	114	--	--	--	--	--	--	--
07...	1525	122	--	--	--	--	--	--	--
15...	1430	332	--	--	--	--	--	--	--
21...	1010	119	--	--	--	--	--	--	--
MAR., 1972									
02...	1220	367	--	--	--	--	--	--	--
APR.									
07...	1145	1790	--	--	--	--	--	--	--
13...	1055	1350	--	--	--	--	--	--	--
MAY									
01...	1500	280	--	--	--	--	--	--	--
SEP.									
05...	1045	72	328	0	80	12	.3	1.9	8.3
19...	1600	80	--	--	--	--	--	--	--
03267400 - CEDAR RUN NEAR TREMONT CITY, OHIO (LAT 40 01 49 LONG 083 48 59)									
SEP., 1972									
10...	1110	5.6	256	0	76	14	.2	4.4	19
03267500 - MAD RIVER AT TREMONT CITY, OHIO (LAT 40 00 25 LONG 083 49 24)									
NOV., 1971									
17...	1305	106	--	--	--	--	--	--	--
JAN., 1972									
12...	1220	263	--	--	84	18	--	2.9	13
FEB.									
11...	1007	145	--	--	--	--	--	--	--
MAR.									
03...	1310	381	--	--	--	--	--	--	--
APR.									
17...	1140	649	--	--	62	11	--	2.6	12
JUNE									
06...	1335	271	--	--	84	18	--	2.9	12

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
GREAT MIAMI RIVER BASIN--Continued								
03262900 - HONEY CREEK NEAR NEW CARLISLE, OHIO (LAT 39 56 11 LONG 084 06 33)								
AUG., 1972 02...	.32	.97	402	350	67	686	8.7	21.0
03264000 - GREENVILLE CREEK NEAR BRADFORD, OHIO (LAT 40 06 08 LONG 084 25 48)								
OCT., 1971 29...	--	--	--	--	--	--	--	15.0
NOV. 19...	--	--	--	--	--	--	--	12.0
DEC. 22...	--	--	--	--	--	--	--	2.0
JAN., 1972 24...	--	--	--	--	--	--	--	4.0
MAR. 16...	--	--	--	--	--	--	--	6.0
APR. 17...	--	--	--	--	--	--	--	13.0
MAY 04...	--	--	--	--	--	--	--	15.0
JUNE 15...	--	--	--	--	--	--	--	20.5
SEP. 06...	.46	1.4	398	330	74	650	8.3	21.0
19...	--	--	--	--	--	--	--	22.5
03266500 - MAD RIVER AT ZANESFIELD, OHIO (LAT 40 21 01 LONG 083 40 28)								
OCT., 1971 18...	--	--	--	--	--	644	--	12.5
NOV. 22...	--	--	--	--	--	387	--	3.0
JAN., 1972 11...	--	--	--	320	--	586	8.1	4.0
MAR. 06...	--	--	--	--	--	570	--	1.0
APR. 17...	--	--	--	240	--	446	8.3	15.0
MAY 16...	--	--	--	--	--	425	--	13.0
JUNE 19...	--	--	--	300	--	540	8.3	16.0
AUG. 07...	.093	.28	262	230	42	450	8.3	19.5
03267000 - MAD RIVER NEAR URBANA, OHIO (LAT 40 06 27 LONG 083 47 57)								
NOV., 1971 04...	--	--	--	--	--	--	--	7.0
17...	--	--	--	--	--	--	--	12.5
DEC. 07...	--	--	--	--	--	--	--	9.0
07...	--	--	--	--	--	--	--	9.0
15...	--	--	--	--	--	--	--	10.5
21...	--	--	--	--	--	--	--	6.0
MAR., 1972 02...	--	--	--	--	--	--	--	--
APR. 07...	--	--	--	--	--	--	--	3.0
13...	--	--	--	--	--	--	--	15.0
MAY 01...	--	--	--	--	--	--	--	16.0
SEP. 05...	.000	.00	410	380	110	669	7.9	15.0
19...	--	--	--	--	--	--	--	18.5
03267400 - CEDAR RUN NEAR TREMONT CITY, OHIO (LAT 40 01 49 LONG 083 48 59)								
SEP., 1972 18...	.000	.00	326	300	90	581	8.0	15.0
03267500 - MAD RIVER AT TREMONT CITY, OHIO (LAT 40 00 25 LONG 083 49 24)								
NOV., 1971 17...	--	--	--	--	--	681	--	12.0
JAN., 1972 12...	--	--	--	350	--	632	8.2	5.0
FEB. 11...	--	--	--	--	--	719	--	3.0
MAR. 03...	--	--	--	--	--	607	--	4.5
APR. 17...	--	--	--	280	--	517	8.2	12.5
JUNE 06...	--	--	--	230	--	452	8.4	17.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
GREAT MIAMI RIVER BASIN--Continued									
03267600 - CHAPMAN CREEK AT TREMONT CITY, OHIO (LAT 40 00 38 LONG 083 50 08)									
SEP., 1972									
18...	0930	2.5	198	0	51	12	.3	1.0	4.5
03267700 - MOORE RUN NEAR EAGLE CITY, OHIO (LAT 39 59 24 LONG 083 49 03)									
NOV., 1971									
17...	1425	14	--	--	--	--	--	--	--
JAN., 1972									
12...	1100	19	--	--	110	25	--	2.4	11
MAR.									
03...	1035	20	--	--	--	--	--	--	--
APR.									
03...	1330	18	--	--	--	--	--	--	--
03...	1345	19	--	--	--	--	--	--	--
12...	1525	22	--	--	--	--	--	--	--
17...	1035	31	--	--	120	30	--	2.9	13
JUNE									
05...	1515	17	--	--	97	30	--	2.6	11
AUG.									
04...	1325	15	--	--	--	--	--	--	--
28...	1100	17	366	0	100	21	.3	1.7	7.5
03267900 - MAD RIVER AT ST PARIS PIKE AT EAGLE CITY O (LAT 39 57 [illegible] LONG 083 49 54)									
NOV., 1971									
17...	1100	112	--	--	--	--	--	--	--
JAN., 1972									
12...	1350	311	--	--	83	16	--	3.4	15
MAR.									
03...	1530	441	--	--	--	--	--	--	--
APR.									
17...	1330	830	--	--	65	12	--	3.0	14
JUNE									
05...	1300	285	--	--	83	14	--	2.5	11
AUG.									
04...	1055	186	--	--	--	--	--	--	--
SEP.									
20...	1140	127	358	0	80	16	.3	2.2	9.7
03267950 - BUCK CREEK NEAR NEW MOOREFIELD, OHIO (LAT 40 00 38 LONG 083 41 56)									
FEB., 1972									
11...	1200	14	--	--	67	15	--	3.6	16
AUG.									
09...	1100	17	326	0	59	15	.2	3.1	14
SEP.									
20...	1130	--	--	--	--	--	--	--	--
03267960 - E F BUCK CREEK NEAR NEW MOOREFIELD, OHIO (LAT 40 00 22 LONG 083 41 37)									
AUG., 1972									
09...	1225	15	--	--	--	--	--	--	--
SEP.									
20...	1030	14	340	0	100	13	.3	1.1	4.8
03269500 - MAD RIVER NEAR SPRINGFIELD, OHIO (LAT 39 55 23 LONG 083 52 13)									
SEP., 1972									
05...	1300	207	330	0	79	27	.3	1.8	8.1
03270500 - GREAT MIAMI RIVER AT DAYTON, OHIO (LAT 39 45 55 LONG 084 11 51)									
SEP., 1972									
11...	0950	316	284	20	81	52	.5	2.2	9.9
03270800 - WOLF CREEK AT TROTWOOD, OHIO (LAT 39 47 39 LONG 084 18 36)									
SEP., 1972									
08...	1415	.82	286	4	66	61	.3	.40	1.7
03271000 - WOLF CREEK AT DAYTON, OHIO (LAT 39 46 00 LONG 084 14 12)									
SEP., 1972									
21...	1130	8.1	260	2	72	51	.3	.40	1.7

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
GREAT MIAMI RIVER BASIN--Continued								
03267600 - CHAPMAN CREEK AT TREMONT CITY, OHIO (LAT 40 00 38 LONG 083 50 08)								
SEP., 1972								
18...	.000	.00	238	210	48	434	8.2	19.0
03267700 - MOORE RUN NEAR EAGLE CITY, OHIO (LAT 39 59 24 LONG 083 49 03)								
NOV., 1971								
17...	--	--	--	--	--	785	--	12.0
JAN., 1972								
12...	--	--	--	410	--	743	8.2	6.5
MAR.								
03...	--	--	--	--	--	768	--	5.0
APR.								
03...	--	--	--	--	--	782	--	11.5
03...	--	--	--	--	--	789	--	11.5
12...	--	--	--	--	--	780	--	15.5
17...	--	--	--	290	--	599	8.3	13.0
JUNE								
05...	--	--	--	430	--	811	8.3	19.0
AUG.								
04...	--	--	--	--	--	781	--	18.5
28...	.011	.03	502	420	120	785	8.0	15.5
03267900 - MAD RIVER AT ST PARIS PIKE AT EAGLE CITY O (LAT 39 57 51 LONG 083 49 54)								
NOV., 1971								
17...	--	--	--	--	--	718	--	11.0
JAN., 1972								
12...	--	--	--	370	--	673	8.2	5.5
MAR.								
03...	--	--	--	--	--	548	--	4.5
APR.								
17...	--	--	--	320	--	587	7.5	13.5
JUNE								
05...	--	--	--	390	--	697	8.2	18.0
AUG.								
04...	--	--	--	--	--	646	--	17.0
SEP.								
20...	.059	.18	416	400	110	701	7.9	15.0
03267950 - BUCK CREEK NEAR NEW MOOREFIELD, OHIO (LAT 40 00 38 LONG 083 41 56)								
FEB., 1972								
11...	--	--	--	380	--	683	7.9	3.5
AUG.								
09...	.020	.06	402	360	92	644	7.9	13.5
SEP.								
20...	--	--	--	--	--	644	--	15.0
03267960 - E F BUCK CREEK NEAR NEW MOOREFIELD, OHIO (LAT 40 00 22 LONG 083 41 37)								
AUG., 1972								
09...	--	--	--	--	--	606	--	14.5
SEP.								
20...	.000	.00	452	400	120	713	7.8	14.0
03269500 - MAD RIVER NEAR SPRINGFIELD, OHIO (LAT 39 55 23 LONG 083 52 13)								
SEP., 1972								
05...	.38	1.2	430	380	110	701	8.1	19.0
03270500 - GREAT MIAMI RIVER AT DAYTON, OHIO (LAT 39 45 55 LONG 084 11 51)								
SEP., 1972								
11...	.80	2.4	462	360	94	747	8.7	20.5
03270800 - WOLF CREEK AT TROTWOOD, OHIO (LAT 39 47 39 LONG 084 18 36)								
SEP., 1972								
08...	.45	1.4	426	310	68	708	8.4	22.0
03271000 - WOLF CREEK AT DAYTON, OHIO (LAT 39 46 00 LONG 084 14 12)								
SEP., 1972								
21...	.024	.08	388	310	93	680	8.4	19.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE OHIO RIVER BASIN

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

GREAT MIAMI RIVER BASIN--Continued

03271800 - TWIN CREEK NEAR INGOMAR, OHIO (LAT 39 42 28 LONG 084 31 30)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
06...	1515	4.8	--	--	--	--	--	--	--
NOV.									
23...	1445	12	--	--	--	--	--	--	--
DEC.									
07...	1310	86	--	--	--	--	--	--	--
28...	1220	52	--	--	--	--	--	--	--
MAR., 1972									
28...	1520	129	--	--	--	--	--	--	--
APR.									
20...	1245	458	--	--	--	--	--	--	--
25...	1135	294	--	--	--	--	--	--	--
SEP.									
19...	1045	7.4	--	--	--	--	--	--	--

03272700 - SEVENMILE CREEK AT CAMDEN, OHIO (LAT 39 37 45 LONG 084 38 40)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
11...	1535	5.3	250	0	47	37	.3	.80	3.4

03272800 - SEVENMILE CREEK AT COLLINSVILLE, OHIO (LAT 39 31 23 LONG 084 36 39)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
OCT., 1971									
06...	1210	4.9	--	--	--	--	--	--	--
NOV.									
24...	1610	9.5	--	--	--	--	--	--	--
DEC.									
28...	1540	56	--	--	--	--	--	--	--
APR., 1972									
17...	1535	468	--	--	--	--	--	--	--
20...	1135	277	--	--	--	--	--	--	--
MAY									
31...	1530	140	--	--	--	--	--	--	--
SEP.									
19...	0900	6.3	--	--	--	--	--	--	--

WABASH RIVER BASIN

03322480 - WABASH RIVER ABOVE BEAVER C AT WABASH OHIO (LAT 40 32 44 LONG 084 44 29)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
01...	1600	6.4	196	8	290	42	.6	.40	2.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE ST. LAWRENCE RIVER BASIN

STREAMS TRIBUTARY TO LAKE ERIE

04177100 - E B ST. JOSEPH RIVER NEAR PIONEER, OHIO (LAT 41 39 56 LONG 084 32 31)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
06...	1230	14	246	0	32	14	.3	.00	.0

04177230 - W B ST. JOSEPH RIVER NEAR PIONEER, OHIO (LAT 41 39 14 LONG 084 34 20)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
AUG., 1972									
01...	1115	11	238	10	50	12	.3	.60	2.8

04177820 - FISH CREEK NEAR EDGERTON, OHIO (LAT 41 27 59 LONG 084 46 37)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
06...	1000	4.8	300	0	51	16	.5	.30	1.4

04180950 - ST. MARYS RIVER AT MENDON, OHIO (LAT 40 40 35 LONG 084 31 07)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
05...	1130	19	216	0	130	61	.5	1.0	4.5

04181000 - ST MARYS RIVER NR WILLSHIRE OHIO (LAT 40 44 03 LONG 084 44 14)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
SEP., 1972									
05...	1300	18	232	0	160	42	.4	.70	3.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
GREAT MIAMI RIVER BASIN--Continued								
03271800 - TWIN CREEK NEAR INGOMAR, OHIO (LAT 39 42 28 LONG 084 31 30)								
OCT., 1971								
06...	--	--	--	--	--	--	--	20.5
NOV.								
23...	--	--	--	--	--	--	--	3.0
DEC.								
07...	--	--	--	--	--	--	--	5.5
28...	--	--	--	--	--	--	--	6.0
MAR., 1972								
28...	--	--	--	--	--	--	--	11.5
APR.								
20...	--	--	--	--	--	--	--	14.0
25...	--	--	--	--	--	--	--	11.0
SEP.								
19...	--	--	--	--	--	--	--	20.5
03272700 - SEVENMILE CREEK AT CAMDEN, OHIO (LAT 39 37 45 LONG 084 38 40)								
SEP., 1972								
11...	.12	.38	306	260	54	558	8.2	22.5
03272800 - SEVENMILE CREEK AT COLLINSVILLE, OHIO (LAT 39 31 23 LONG 084 36 39)								
OCT., 1971								
06...	--	--	--	--	--	--	--	17.5
NOV.								
24...	--	--	--	--	--	--	--	5.0
DEC.								
28...	--	--	--	--	--	--	--	6.5
APR., 1972								
17...	--	--	--	--	--	--	--	16.0
20...	--	--	--	--	--	--	--	14.0
MAY								
31...	--	--	--	--	--	--	--	14.5
SEP.								
19...	--	--	--	--	--	--	--	19.5
WABASH RIVER BASIN								
03322480 - WABASH RIVER ABOVE BEAVER C AT WABASH OHIO (LAT 40 32 44 LONG 084 44 29)								
AUG., 1972								
01...	.074	.23	656	450	280	942	8.4	24.5
ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE ST. LAWRENCE RIVER BASIN								
STREAMS TRIBUTARY TO LAKE ERIE								
04177100 - E B ST. JOSEPH RIVER NEAR PIONEER, OHIO (LAT 41 39 56 LONG 084 32 31)								
SEP., 1972								
06...	.041	.13	294	250	48	490	82.0	16.0
04177230 - W B ST. JOSEPH RIVER NEAR PIONEER, OHIO (LAT 41 39 14 LONG 084 34 20)								
AUG., 1972								
01...	.078	.24	306	260	48	496	8.5	22.5
04177820 - FISH CREEK NEAR EDGERTON, OHIO (LAT 41 27 59 LONG 084 46 37)								
SEP., 1972								
06...	.034	.10	370	300	54	575	8.0	17.0
04180950 - ST. MARYS RIVER AT MENDON, OHIO (LAT 40 40 35 LONG 084 31 07)								
SEP., 1972								
05...	.34	1.0	490	270	92	761	7.7	18.0
04181000 - ST MARYS RIVER NR WILLSHIRE OHIO (LAT 40 44 03 LONG 084 44 14)								
SEP., 1972								
05...	.29	.88	514	320	130	757	8.1	19.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
STREAMS TRIBUTARY TO LAKE ERIE--Continued									
04185000 - TIFFIN RIVER AT STRYKER OHIO (LAT 41 30 17 LONG 084 25 49)									
OCT., 1971									
06...	0915	19	--	--	--	--	--	--	--
DEC.									
02...	1125	34	--	--	--	--	--	--	--
JAN., 1972									
19...	1055	91	--	--	140	39	--	4.3	19
FEB.									
15...	1350	110	--	--	--	--	--	--	--
MAR.									
22...	1540	866	--	--	--	--	--	--	--
22...	1650	869	--	--	--	--	--	--	--
APR.									
08...	2005	306	--	--	--	--	--	--	--
22...	--	1610	--	--	71	23	--	7.9	35
22...	1845	1610	--	--	--	--	--	--	--
MAY									
04...	0930	673	--	--	77	19	--	4.0	17
AUG.									
22...	1445	45	266	0	61	33	.1	.80	3.6
SEP.									
20...	1700	232	--	--	--	--	--	--	--
04185900 - AUGLAIZE RIVER NEAR BUCKLAND, OHIO (LAT 40 39 11 LONG 084 15 35)									
SEP., 1972									
05...	1000	9.0	348	0	200	110	1.1	1.4	6.0
04185950 - AUGLAIZE RIVER NEAR SPENCERVILLE, OHIO (LAT 40 44 36 LONG 084 18 57)									
APR., 1972									
27...	1855	3420	--	--	28	7.5	--	2.6	12
JUNE									
27...	1615	61	--	--	100	33	--	7.6	34
AUG.									
25...	0910	12	306	14	160	88	.8	.90	3.8
04188300 - BLANCHARD RIVER AT MT. BLANCHARD, OHIO (LAT 40 53 28 LONG 083 33 50)									
SEP., 1972									
07...	1330	.61	179	0	180	40	.5	.60	2.6
04188400 - BLANCHARD RIVER ABOVE FINDLAY, OHIO (LAT 41 02 02 LONG 083 34 46)									
APR., 1972									
23...	1215	2350	--	--	64	18	--	8.4	37
JUNE									
26...	1750	22	--	--	180	28	--	2.9	13
AUG.									
21...	1315	15	249	0	110	23	.4	2.0	8.8
04189180 - RILEY CREEK NEAR OTTAWA, OHIO (LAT 41 00 00 LONG 084 00 00)									
SEP., 1972									
05...	1530	4.4	225	0	120	51	.7	.50	2.3
04190400 - LITTLE AUGLAIZE RIVER NEAR MELROSE, OHIO (LAT 41 03 33 LONG 084 24 01)									
SEP., 1972									
06...	0745	1.0	150	4	200	40	.4	.10	.6
04191100 - FLATROCK CREEK NEAR PAYNE, OHIO (LAT 41 05 57 LONG 084 40 06)									
AUG., 1972									
01...	1415	2.4	266	8	85	40	.3	1.2	5.5
04192500 - MAUMEE RIVER NEAR DEFIANCE, OHIO (LAT 41 17 31 LONG 084 16 52)									
DEC., 1971									
02...	1115	491	--	--	--	--	--	--	--
JAN., 1972									
25...	1250	6400	--	--	87	36	--	4.4	19
MAR.									
24...	1130	6600	--	--	75	27	--	7.1	31
MAY									
04...	1245	3580	--	--	92	25	--	4.6	20
AUG.									
24...	0950	1020	198	0	120	51	.6	2.8	12

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04185000 - TIFFIN RIVER AT STRYKER OHIO (LAT 41 30 17 LONG 084 25 49)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT., 1971								
06...	--	--	--	--	--	--	--	15.0
DEC.								
02...	--	--	--	--	--	697	--	.5
JAN., 1972								
19...	--	--	--	440	--	858	8.5	1.5
FEB.								
15...	--	--	--	--	--	728	--	1.0
MAR.								
22...	--	--	--	--	--	577	--	6.5
22...	--	--	--	--	--	--	--	6.5
APR.								
08...	--	--	--	--	--	--	--	4.5
22...	--	--	--	250	--	517	7.6	9.5
22...	--	--	--	--	--	--	--	9.5
MAY								
04...	--	--	--	270	--	526	7.7	14.0
AUG.								
22...	.32	1.0	366	280	62	606	8.1	24.0
SEP.								
20...	--	--	--	--	--	--	--	20.0

04185900 - AUGLAIZE RIVER NEAR BUCKLAND, OHIO (LAT 40 39 11 LONG 084 15 35)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
05...	1.2	3.7	766	450	160	1140	8.2	18.0

04185950 - AUGLAIZE RIVER NEAR SPENCERVILLE, OHIO (LAT 40 44 36 LONG 084 18 57)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
APR., 1972								
27...	--	--	--	110	--	245	6.7	11.0
JUNE								
27...	--	--	--	370	--	758	7.3	20.5
AUG.								
25...	.83	2.6	656	410	140	991	8.6	23.5

04188300 - BLANCHARD RIVER AT MT. BLANCHARD, OHIO (LAT 40 53 28 LONG 083 33 50)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
07...	.075	.23	484	340	190	712	8.2	26.0

04188400 - BLANCHARD RIVER ABOVE FINDLAY, OHIO (LAT 41 02 02 LONG 083 34 46)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
APR., 1972								
23...	--	--	--	180	--	394	6.7	13.0
JUNE								
26...	--	--	--	430	--	800	8.3	20.5
AUG.								
21...	.15	.47	436	330	130	654	7.8	22.5

04189180 - RILEY CREEK NEAR OTTAWA, OHIO (LAT 41 00 00 LONG 084 00 00)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
05...	.14	.44	516	350	160	789	7.8	21.0

04190400 - LITTLE AUGLAIZE RIVER NEAR MELROSE, OHIO (LAT 41 03 33 LONG 084 24 01)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
SEP., 1972								
06...	.045	.14	486	330	200	718	8.4	16.0

04191100 - FLATROCK CREEK NEAR PAYNE, OHIO (LAT 41 05 57 LONG 084 40 06)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
AUG., 1972								
01...	.11	.33	442	330	98	691	8.3	22.0

04192500 - MAUMEE RIVER NEAR DEFIANCE, OHIO (LAT 41 17 31 LONG 084 16 52)

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
DEC., 1971								
02...	--	--	--	--	--	886	--	3.0
JAN., 1972								
25...	--	--	--	270	--	606	7.8	.0
MAR.								
24...	--	--	--	250	--	528	7.1	5.0
MAY								
04...	--	--	--	290	--	590	7.8	16.0
AUG.								
24...	.39	1.2	466	290	130	697	7.9	25.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
04192600 - SOUTH TURKEYFOOT CREEK NEAR MALINTA, OHIO (LAT 41 22 15 LONG 084 01 22)									
SEP., 1972 06...	1430	1.2	298	8	79	51	.2	.80	3.8
04192800 - BEAVER CREEK NEAR GRAND RAPIDS, OHIO (LAT 41 23 37 LONG 083 50 42)									
SEP., 1972 06...	1530	2.7	246	0	310	69	.4	.00	.0
04194200 - TOUSSAINT CREEK NEAR LIMESTONE, OHIO (LAT 41 32 54 LONG 083 14 29)									
SEP., 1972 07...	1000	2.0	250	20	270	190	.8	1.3	5.6
04194400 - S B PORTAGE RIVER NEAR SIX POINTS, OHIO (LAT 41 18 41 LONG 083 30 36)									
SEP., 1972 07...	1115	5.8	162	6	110	62	.3	3.4	15
04194500 - PORTAGE RIVER NEAR PEMBERVILLE, OHIO (LAT 41 22 44 LONG 083 28 34)									
SEP., 1972 07...	0800	10	198	0	180	89	.4	1.9	8.4
04196000 - SUNDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40 48 13 LONG 083 00 21)									
NOV., 1971 18...	1445	3.3	--	--	--	--	--	--	--
JAN., 1972 17...	1305	22	--	--	130	60	--	4.5	20
17...	1505	22	--	--	--	--	--	--	--
MAR. 03...	1330	348	--	--	--	--	--	--	--
06...	1300	73	--	--	100	40	--	7.3	32
APR. 13...	1125	627	--	--	--	--	--	--	--
21...	1050	1860	--	--	--	--	--	--	--
MAY 10...	1115	384	--	--	--	--	--	--	--
JULY 11...	--	41	--	--	94	41	--	3.8	17
AUG. 28...	1535	9.5	199	4	110	78	.3	5.9	26
SEP. 21...	1345	4.9	--	--	--	--	--	--	--
04196600 - TYMOCHTEE CREEK NR MARSEILLES OHIO (LAT 40 42 58 LONG 083 23 32)									
JULY, 1972 12...	1435	14	--	--	120	21	--	5.8	26
AUG. 31...	1320	3.5	224	6	140	25	.4	1.5	6.6
04197000 - SANDUSKY RIVER NEAR MEXICO, OHIO (LAT 41 02 39 LONG 083 11 42)									
DEC., 1971 06...	1220	45	--	--	--	--	--	--	--
JAN., 1972 21...	0945	206	--	--	--	--	--	--	--
FEB. 14...	1135	110	--	--	--	--	--	--	--
MAR. 03...	1115	3810	--	--	--	--	--	--	--
09...	1230	394	--	--	--	--	--	--	--
APR. 21...	1650	6360	--	--	--	--	--	--	--
MAY 11...	1210	3310	--	--	--	--	--	--	--
SEP. 21...	1245	128	--	--	--	--	--	--	--
04198010 - GREEN CREEK NEAR FREMONT, OHIO (LAT 41 23 36 LONG 083 01 35)									
SEP., 1972 07...	1345	16	69	0	1200	23	1.0	.30	1.2
04198015 - COLD CREEK NEAR CASTALIA, OHIO (LAT 41 25 12 LONG 082 48 02)									
SEP., 1972 07...	1250	33	88	0	970	23	.8	.30	1.5

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
STREAMS TRIBUTARY TO LAKE ERIE--Continued								
04192600 - SOUTH TURKEYFOOT CREEK NEAR MALINTA, OHIO (LAT 41 22 15 LONG 084 01 22)								
SEP., 1972								
06...	.28	.61	464	340	82	724	8.4	19.0
04192800 - BEAVER CREEK NEAR GRAND RAPIDS, OHIO (LAT 41 23 37 LONG 083 50 42)								
SEP., 1972								
06...	.006	.02	726	530	330	1060	8.2	19.5
04194200 - TOUSSAINT CREEK NEAR LIMESTONE, OHIO (LAT 41 32 54 LONG 083 14 29)								
SEP., 1972								
07...	.34	1.0	792	570	330	1220	8.7	17.0
04194400 - S B PORTAGE RIVER NEAR SIX POINTS, OHIO (LAT 41 18 41 LONG 083 30 36)								
SEP., 1972								
07...	.66	2.0	416	270	130	693	8.4	17.5
04194500 - PORTAGE RIVER NEAR PEMBERVILLE, OHIO (LAT 41 22 44 LONG 083 28 34)								
SEP., 1972								
07...	.38	.92	600	350	188	906	7.6	18.0
04196000 - SUNDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40 48 13 LONG 083 00 21)								
NOV., 1971								
18...	--	--	--	--	--	1030	--	15.5
JAN., 1972								
17...	--	--	--	370	--	847	6.9	2.0
17...	--	--	--	--	--	--	--	2.0
MAR.								
03...	--	--	--	--	--	--	--	2.5
06...	--	--	--	280	--	628	8.2	1.5
APR.								
13...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	9.0
MAY								
10...	--	--	--	--	--	370	--	11.0
JULY								
11...	--	--	--	290	--	665	7.9	--
AUG.								
28...	1.7	5.2	466	290	120	783	8.3	22.0
SEP.								
21...	--	--	--	--	--	--	--	20.5
04196600 - TYMOCHTEE CREEK NR MARSEILLES OHIO (LAT 40 42 58 LONG 083 23 32)								
JULY, 1972								
12...	--	--	--	350	--	669	8.3	--
AUG.								
31...	.14	.45	476	340	150	677	8.5	22.5
04197000 - SANDUSKY RIVER NEAR MEXICO, OHIO (LAT 41 02 39 LONG 083 11 42)								
DEC., 1971								
06...	--	--	--	--	--	--	--	5.5
JAN., 1972								
21...	--	--	--	--	--	--	--	.5
FEB.								
14...	--	--	--	--	--	--	--	1.0
MAR.								
03...	--	--	--	--	--	--	--	2.0
09...	--	--	--	--	--	--	--	2.5
APR.								
21...	--	--	--	--	--	--	--	10.0
MAY								
11...	--	--	--	--	--	--	--	13.5
SEP.								
21...	--	--	--	--	--	--	--	20.0
04198010 - GREEN CREEK NEAR FREMONT, OHIO (LAT 41 23 36 LONG 083 01 35)								
SEP., 1972								
07...	.10	.31	1890	1300	1200	1890	7.9	17.0
04198015 - COLD CREEK NEAR CASTALIA, OHIO (LAT 41 25 12 LONG 082 48 02)								
SEP., 1972								
07...	.078	.24	1510	1000	930	1630	7.9	15.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)
STREAMS TRIBUTARY TO LAKE ERIE--Continued									
04198020 - W B HURON RIVER NEAR MONROEVILLE, OHIO (LAT 41 16 46 LONG 082 40 32)									
AUG., 1972 01...	0945	22	208	0	170	24	.3	.40	2.0
04200050 - WEST BRANCH BLACK RIVER NEAR OBERLIN, OHIO (LAT 41 15 54 LONG 082 10 47)									
SEP., 1972 06...	1450	1.2	222	0	140	54	.4	.60	2.8
04201400 - WEST BRANCH ROCKY RIVER AT WEST VIEW, OHIO (LAT 41 21 03 LONG 081 54 12)									
SEP., 1972 06...	1025	7.2	210	0	120	92	.4	1.1	5.0
04202000 - CUYAHOGA RIVER AT HIRAM RAPIDS, OHIO (LAT 41 20 26 LONG 081 10 01)									
NOV., 1971 12...	1130	75	--	--	--	--	--	--	--
JAN., 1972 13...	1215	195	--	--	39	24	--	.50	2.3
MAR. 10...	1210	618	--	--	33	28	--	1.1	4.8
MAY 12...	1320	336	--	--	--	--	--	--	--
JULY 14...	0910	104	--	--	24	19	--	.50	2.2
SEP. 19...	1045	198	72	0	35	17	.1	.60	3.4
04204000 - LITTLE CUYAHOGA RIVER AT MOGADORE, OHIO (LAT 41 03 47 LONG 081 23 38)									
NOV., 1971 18...	1210	4.2	--	--	--	--	--	--	--
JAN., 1972 20...	1025	12	--	--	50	25	--	.60	2.8
MAR. 10...	1305	32	--	--	57	28	--	.90	3.8
MAY 16...	1330	20	--	--	--	--	--	--	--
JULY 19...	--	26	--	--	42	22	--	.90	3.9
SEP. 15...	1355	11	--	--	--	--	--	--	--
04204500 - L CUYAHOGA R AT MASSILLON RD AT AKRON OHIO (LAT 41 03 37 LONG 081 27 48)									
NOV., 1971 08...	1740	7.8	--	--	--	--	--	--	--
JAN., 1972 20...	1340	25	--	--	62	31	--	.70	3.1
MAR. 09...	1315	58	--	--	62	83	--	1.0	4.3
MAY 16...	1115	39	--	--	--	--	--	--	--
JULY 19...	1105	51	--	--	48	23	--	.70	3.3
SEP. 15...	1100	30	126	0	74	33	.2	1.1	4.6
04205000 - SPRINGFIELD LAKE OUTLET AT AKRON, OHIO (LAT 41 03 21 LONG 081 27 52)									
NOV., 1971 08...	1245	.36	--	--	--	--	--	--	--
JAN., 1972 20...	1215	3.4	--	--	72	65	--	.50	2.3
MAR. 09...	1050	13	--	--	69	120	--	1.0	4.6
MAY 16...	1225	7.7	--	--	66	57	--	.50	2.3
JULY 19...	1200	12	--	--	--	--	--	--	--
SEP. 15...	1205	5.4	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
STREAMS TRIBUTARY TO LAKE ERIE--Continued								
04198020 - W B HURON RIVER NEAR MONROEVILLE, OHIO (LAT 41 16 46 LONG 082 40 32)								
AUG., 1972								
01...	.14	.44	466	330	160	687	7.9	22.0
04200050 - WEST BRANCH BLACK RIVER NEAR OBERLIN, OHIO (LAT 41 15 54 LONG 082 10 47)								
SEP., 1972								
06...	.37	1.1	478	320	140	740	7.8	20.5
04201400 - WEST BRANCH ROCKY RIVER AT WEST VIEW, OHIO (LAT 41 21 03 LONG 081 54 12)								
SEP., 1972								
06...	.48	1.5	500	270	98	818	8.1	19.0
04202000 - CUYAHOGA RIVER AT HIRAM RAPIDS, OHIO (LAT 41 20 26 LONG 081 10 01)								
NOV., 1971								
12...	--	--	--	--	--	320	--	5.0
JAN., 1972								
13...	--	--	--	110	--	275	7.2	2.0
MAR.								
10...	--	--	--	83	--	253	7.8	.5
MAY								
12...	--	--	--	--	--	246	--	17.0
JULY								
14...	--	--	--	110	--	265	8.0	24.0
SEP.								
19...	.11	.34	174	200	140	251	8.0	19.0
04204000 - LITTLE CUYAHOGA RIVER AT MOGADORE, OHIO (LAT 41 03 47 LONG 081 23 38)								
NOV., 1971								
18...	--	--	--	--	--	431	--	9.0
JAN., 1972								
20...	--	--	--	150	--	364	8.1	4.0
MAR.								
10...	--	--	--	160	--	376	7.8	2.0
MAY								
16...	--	--	--	--	--	315	--	16.5
JULY								
19...	--	--	--	120	--	304	7.4	25.0
SEP.								
15...	--	--	--	--	--	318	--	21.0
04204500 - L CUYAHOGA R AT MASSILLON RD AT AKRON OHIO (LAT 41 03 37 LONG 081 27 48)								
NOV., 1971								
08...	--	--	--	--	--	480	--	7.5
JAN., 1972								
20...	--	--	--	180	--	437	8.1	4.0
MAR.								
09...	--	--	--	170	--	566	7.4	2.0
MAY								
16...	--	--	--	--	--	398	--	15.0
JULY								
19...	--	--	--	150	--	350	7.6	23.5
SEP.								
15...	.18	.54	290	180	77	449	7.5	17.0
04205000 - SPRINGFIELD LAKE OUTLET AT AKRON, OHIO (LAT 41 03 21 LONG 081 27 52)								
NOV., 1971								
08...	--	--	--	--	--	541	--	3.5
JAN., 1972								
20...	--	--	--	200	--	558	7.6	1.0
MAR.								
09...	--	--	--	180	--	709	7.9	1.0
MAY								
16...	--	--	--	200	--	532	7.8	15.0
JULY								
19...	--	--	--	--	--	460	--	26.0
SEP.								
15...	--	--	--	--	--	460	--	17.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
STREAMS TRIBUTARY TO LAKE ERIE--Continued									
04207500 - OHIO CANAL AT INDEPENDENCE, OHIO (LAT 41 23 25 LONG 081 37 30)									
NOV., 1971									
12...	1305	55	--	--	--	--	--	--	--
JAN., 1972									
17...	1315	60	--	--	110	180	--	3.5	15
MAY									
17...	1200	55	--	--	--	--	--	--	--
JULY									
25...	1400	76	--	--	90	56	--	2.7	12
SEP.									
27...	1440	92	--	--	--	--	--	--	--
04208900 - AURORA BRANCH NEAR CHAGRIN FALLS, OHIO (LAT 41 24 40 LONG 081 24 44)									
SEP., 1972									
05...	1405	12	192	6	51	24	.2	.90	4.0
04210000 - PHELPS CREEK NEAR WINDSOR, OHIO (LAT 41 30 56 LONG 080 56 07)									
JULY, 1972									
31...	1445	--	--	--	43	16	--	.50	2.1
SEP.									
05...	12[illegible]	.60	184	0	48	13	.2	.10	.4
04211500 - MILL CREEK NEAR JEFFERSON, OHIO (LAT 41 45 11 LONG 080 48 03)									
NOV., 1971									
11...	1230	38	--	--	--	--	--	--	--
JAN., 1972									
12...	1120	128	--	--	51	33	--	.90	4.1
MAY									
10...	1710	305	--	--	--	--	--	--	--
JULY									
12...	1000	37	--	--	32	25	--	.90	4.1
04212000 - GRAND RIVER NEAR MADISON, OHIO (LAT 41 44 20 LONG 081 02 48)									
NOV., 1971									
02...	1705	79	--	--	--	--	--	--	--
11...	1515	161	--	--	--	--	--	--	--
JAN., 1972									
24...	--	1520	--	--	45	25	--	7.4	33
MAR.									
09...	1545	2940	--	--	--	--	--	--	--
14...	1035	4580	--	--	--	--	--	--	--
APR.									
16...	0945	2840	--	--	--	--	--	--	--
MAY									
10...	0925	2170	--	--	--	--	--	--	--
JUNE									
24...	0850	5180	--	--	--	--	--	--	--
24...	0915	5130	--	--	27	15	--	1.9	8.6
JULY									
11...	0955	245	--	--	--	--	--	--	--
SEP.									
11...	1100	10	108	0	48	24	.2	.20	.9
20...	1400	105	--	--	--	--	--	--	--
04212500 - ASHTABULA RIVER NEAR ASHTABULA, OHIO (LAT 41 51 20 LONG 080 45 44)									
NOV., 1971									
02...	1435	6.4	--	--	--	--	--	--	--
10...	1530	84	--	--	--	--	--	--	--
DEC.									
01...	1100	551	--	--	--	--	--	--	--
JAN., 1972									
11...	1545	335	--	--	43	20	--	.90	4.1
MAR.									
08...	1510	1680	--	--	26	19	--	1.2	5.2
08...	1540	1680	--	--	--	--	--	--	--
14...	1200	1940	--	--	--	--	--	--	--
APR.									
16...	1045	770	--	--	--	--	--	--	--
MAY									
09...	1015	189	--	--	--	--	--	--	--
JUNE									
24...	1130	2320	--	--	--	--	--	--	--
24...	1145	2320	--	--	26	8.6	--	2.3	10
JULY									
11...	1320	207	--	--	--	--	--	--	--
SEP.									
13...	1000	6.0	76	0	70	30	.1	.50	2.1
20...	1500	13	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04207500 - OHIO CANAL AT INDEPENDENCE, OHIO (LAT 41 23 25 LONG 081 37 30)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971 12...	--	--	--	--	--	1590	--	12.0
JAN., 1972 17...	--	--	--	230	--	997	8.0	1.0
MAY 17...	--	--	--	--	--	536	--	16.0
JULY 25...	--	--	--	200	--	584	7.7	26.0
SEP. 27...	--	--	--	--	--	429	--	19.5

04208900 - AURORA BRANCH NEAR CHAGRIN FALLS, OHIO (LAT 41 24 40 LONG 081 24 44)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
SEP., 1972 05...	.30	.93	294	210	42	463	8.5	17.5

04210000 - PHELPS CREEK NEAR WINDSOR, OHIO (LAT 41 30 56 LONG 080 56 07)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JULY, 1972 31...	--	--	--	170	--	371	8.4	21.0
SEP. 05...	.020	.06	272	190	39	403	7.8	15.5

04211500 - MILL CREEK NEAR JEFFERSON, OHIO (LAT 41 45 11 LONG 080 48 03)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971 11...	--	--	--	--	--	449	--	4.0
JAN., 1972 12...	--	--	--	93	--	262	7.3	5.0
MAY 10...	--	--	--	--	--	183	--	12.0
JULY 12...	--	--	--	93	--	264	7.5	23.0

04212000 - GRAND RIVER NEAR MADISON, OHIO (LAT 41 44 26 LONG 081 02 48)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971 02...	--	--	--	--	--	-	--	16.0
11...	--	--	--	--	--	395	--	6.0
JAN., 1972 24...	--	--	--	82	--	248	7.2	2.0
MAR. 09...	--	--	--	--	--	--	--	.5
14...	--	--	--	--	--	--	--	--
APR. 16...	--	--	--	--	--	--	--	11.0
MAY 10...	--	--	--	--	--	248	--	10.5
JUNE 24...	--	--	--	--	--	--	--	14.0
24...	--	--	--	62	--	181	7.8	14.0
JULY 11...	--	--	--	--	--	275	--	22.0
SEP. 11...	.022	.07	206	140	52	348	7.7	19.5
20...	--	--	--	--	--	--	--	18.5

04212500 - ASHTABULA RIVER NEAR ASHTABULA, OHIO (LAT 41 51 20 LONG 080 45 44)

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV., 1971 02...	--	--	--	--	--	--	--	17.5
10...	--	--	--	--	--	361	--	3.0
DEC. 01...	--	--	--	--	--	--	--	2.0
JAN., 1972 11...	--	--	--	81	--	228	7.7	1.0
MAR. 08...	--	--	--	56	--	169	6.4	.5
08...	--	--	--	--	--	--	--	.5
14...	--	--	--	--	--	--	--	--
APR. 16...	--	--	--	--	--	--	--	10.5
MAY 09...	--	--	--	--	--	277	--	9.0
JUNE 24...	--	--	--	--	--	--	--	13.0
24...	--	--	--	48	--	134	7.1	13.0
JULY 11...	--	--	--	--	--	151	--	24.5
SEP. 13...	.004	.01	214	130	68	353	8.0	20.0
20...	--	--	--	--	--	--	--	22.5

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS IN THE ST. LAWRENCE RIVER BASIN

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)
STREAMS TRIBUTARY TO LAKE ERIE--Continued									
04213000 - CONNEAUT CREEK AT CONNEAUT, OHIO (LAT 41 55 37 LONG 080 36 15)									
NOV., 1971									
02...	1300	20	--	--	--	--	--	--	--
10...	1145	194	--	--	--	--	--	--	--
10...	1150	194	--	--	--	--	--	--	--
DEC.									
01...	1330	1660	--	--	--	--	--	--	--
JAN., 1972									
11...	1150	545	--	--	37	17	--	.60	2.8
MAR.									
01...	1325	1600	--	--	--	--	--	--	--
08...	1130	1130	--	--	--	--	--	--	--
14...	1325	1950	--	--	--	--	--	--	--
APR.									
16...	1130	1080	--	--	--	--	--	--	--
MAY									
09...	1445	750	--	--	--	--	--	--	--
09...	1500	774	--	--	--	--	--	--	--
JUNE									
23...	2000	2890	--	--	--	--	--	--	--
24...	--	738	--	--	21	8.1	--	1.5	6.5
JULY									
11...	1640	295	--	--	--	--	--	--	--
SEP.									
13...	1405	24	120	0	55	29	.1	.60	2.7
20...	1600	34	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04213000 - CONNEAUT CREEK AT CONNEAUT, OHIO (LAT 41 55 37 LONG 080 36 15)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV., 1971								
02...	--	--	--	--	--	--	--	17.5
10...	--	--	--	--	--	--	--	3.0
10...	--	--	--	--	--	282	--	3.0
DEC.								
01...	--	--	--	--	--	--	--	3.0
JAN., 1972								
11...	--	--	--	110	--	220	7.9	1.0
MAR.								
01...	--	--	--	--	--	--	--	2.0
08...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
APR.								
16...	--	--	--	--	--	--	--	11.0
MAY								
09...	--	--	--	--	--	236	--	10.0
09...	--	--	--	--	--	--	--	10.0
JUNE								
23...	--	--	--	--	--	--	--	13.5
24...	--	--	--	47	--	128	7.6	13.0
JULY								
11...	--	--	--	--	--	171	--	24.0
SEP.								
13...	.28	.86	236	160	62	375	7.8	21.5
20...	--	--	--	--	--	--	--	20.0

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
ATHENS COUNTY										
391934N082065000 ATHENS OHIO MUNICIPAL WELL 2A (AT-10), DEPTH 52 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 4, 1971.A	4500	800	30	280	0	110	68	--	.9	.2
JUNE 5, 1972.A	5100	--	32	372	0	93	64	--	.0	.0
AUGLAIZE COUNTY										
403403N084125700 WAPAKONETA OHIO MUNICIPAL WELL 6 (AU-11), DEPTH 268 FT, WATER BEARING FORMATION DOLOMITE										
NOV. 3, 1971.A	1900	0	28	386	0	170	18	--	2.5	.6
MAY 23, 1972.A	2000	--	28	288	0	180	20	--	2.2	.5
BUTLER COUNTY										
392445N0843330 HAMILTON OHIO CHAMPION PAPER CO.,WELL 4 (BU-36), DEPTH 168 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971.A	100	0	--	344	0	95	42	.2	6.4	1.4
FEB. 14, 1972..	60	0	--	348	0	98	41	.2	5.1	1.1
MAY 12, 1972..	250	25	--	342	0	95	42	.3	5.4	1.2
AUG. 10, 1972.A	2000	0	--	344	0	91	46	.2	3.5	.8
CLARK COUNTY										
395835N0834917 SPRINGFIELD OHIO MUNICIPAL WELL 4 (CL-20), DEPTH 96 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 3, 1971.A	890	120	5.8	362	0	89	16	--	2.9	.7
MAY 23, 1972.A	980	--	8.7	356	0	99	21	--	3.8	.8
HAMILTON COUNTY										
391634N0841526 LOVELAND OHIO MUNICIPAL WELL 2 (H-22), DEPTH 70 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 30, 1971.A	20	0	11	334	0	52	28	--	4.2	1.0
JUNE 5, 1972.A	10	--	14	336	0	51	28	--	5.6	1.3
390645N0844805 NORTH BEND OHIO, DUPONT CORP. WELL 38 (H-21), DEPTH 134 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 11, 1971.A	52	110	15	468	0	120	30	--	6.1	1.4
JUNE 5, 1972.A	30	--	19	402	0	91	56	--	7.6	1.7
391748N0843938 ROSS OHIO SOUTHWEST OHIO WATER CO. COLLECTOR 1 (H-19), DEPTH 144 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971.A	230	430	--	342	0	87	36	.3	6.7	1.5
FEB. 14, 1972..	90	410	--	350	0	81	36	.2	5.7	1.3
MAY 12, 1972..	50	380	--	344	0	76	36	.4	5.6	1.2
AUG.10, 1972.A	190	420	--	344	0	80	40	.2	4.0	.9
JEFFERSON COUNTY										
401853N0803611 MINGO JUNCTION OHIO MUNICIPAL WELL (JE-10), DEPTH 74 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 4, 1971.A	240	2000	34	108	0	180	40	--	10	2.4
JUNE 5, 1972.A	220	--	32	81	0	180	40	--	1.7	.4
MEDINA COUNTY										
410040N0814249 WADSWORTH OHIO MUNICIPAL WELL 7 (MD-10), DEPTH 227 FT WATER BEARING FORMATION SANDSTONE										
NOV. 10, 1971.A	5400	500	2.6	98	0	27	2.0	--	.0	.0
MAY 22, 1972.A	12000	--	2.4	94	0	43	2.0	--	.0	.0
MIAMI COUNTY										
400258N0841228 TROY OHIO MUNICIPAL WELL 6 (MI-15), DEPTH 177, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971.A	1600	0	—	356	0	63	24	.8	.5	.1
FEB. 14, 1972..	1300	38	--	354	0	65	19	.8	.1	.0
MAY 11, 1972..	1100	63	--	348	0	54	20	.9	1.9	.4
AUG. 9, 1972.A	1400	24	--	294	0	58	24	.8	1.7	.4

A Heavy metals determined on this date, see page 464.

CHEMICAL ANALYSES OF GROUND WATER IN OHIO, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TOTAL PHOS-PHORUS (P-PO$_4$) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	pH	TEMP-ERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
ATHENS COUNTY										
391934N082065000 ATHENS OHIO MUNICIPAL WELL 2A (AT-10), DEPTH 52 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 4, 1971..	.07	.02	390	160	552	816	7.7	--	2	.04
JUNE 5, 1972..	.14	.04	440	130	596	879	7.7	13.5	0	.00
AUGLAIZE COUNTY										
403403N084125700 WAPAKONETA OHIO MUNICIPAL WELL 6 (AU-11), DEPTH 268 FT, WATER BEARING FORMATION DOLOMITE										
NOV. 3, 1971..	.12	.04	470	150	604	889	7.4	--	6	.04
MAY 23, 1972..	.19	.06	390	150	534	785	8.0	--	3	.01
BUTLER COUNTY										
392445N0843330 HAMILTON OHIO CHAMPION PAPER CO.,WELL4 (BU-36), DEPTH 168 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971..	--	--	390	110	488	789	7.3	16.5	--	--
FEB. 14, 1972..	--	--	400	110	492	788	7.4	17.0	--	--
MAY 12, 1972..	--	--	380	100	504	797	7.4	17.0	--	--
AUG. 10, 1972..	--	--	390	110	516	794	7.5	17.0	--	--
CLARK COUNTY										
395835N0834917 SPRINGFIELD OHIO MUNICIPAL WELL 4 (CL-20), DEPTH 96 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 3, 1971..	.05	.02	410	110	462	713	7.4	--	3	.02
MAY 23, 1972..	.03	.01	410	120	480	742	7.8	--	2	.00
HAMILTON COUNTY										
391634N0841526 LOVELAND OHIO MUNICIPAL WELL 2 (H-22), DEPTH 70 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 30, 1971..	.17	.06	340	66	392	646	--	13.5	0	.00
JUNE 5, 1972	.10	.03	360	84	420	671	7.5	13.5	0	.01
390645N0844805 NORTH BEND OHIO, DUPONT CORP. WELL 38 (H-21), DEPTH 134 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 11, 1971..	.07	.02	500	120	612	960	7.3	14.0	0	.14
JUNE 5, 1972..	.02	.01	480	150	618	933	7.8	14.5	0	.01
391748N0843938 ROSS OHIO SOUTHWEST OHIO WATER CO. COLLECTOR 1 (H-19), DEPTH 144 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971..	--	--	380	100	468	757	7.4	14.5	--	--
FEB. 14, 1972	--	--	380	92	470	757	7.4	16.0	--	--
MAY 12, 1972..	--	--	370	88	488	762	7.5	15.0	--	--
AUG. 10, 1972..	--	--	370	88	484	747	7.6	14.5	--	--
JEFFERSON COUNTY										
401853N0803611 MINGO JUNCTION OHIO MUNICIPAL WELL (JE-10), DEPTH 74 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 4, 1971..	.09	.03	270	180	430	660	7.0	19.5	3	.05
JUNE 5, 1972..	.09	.03	250	180	406	621	7.6	--	0	.04
MEDINA COUNTY										
410040N0814249 WADSWORTH OHIO MUNICIPAL WELL 7 (MD-10), DEPTH 227 FT WATER BEARING FORMATION SANDSTONE										
NOV. 10, 1971..	.14	.04	110	30	122	219	8.0	--	0	.09
MAY 22, 1972..	3.0	.99	120	43	144	243	6.6	--	1	.00
MIAMI COUNTY										
400258N0841228 TROY OHIO MUNICIPAL WELL 6 (MI-15), DEPTH 177, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971..	--	--	360	68	416	687	7.4	13.5	--	--
FEB. 14, 1972..	--	--	340	50	398	669	7.5	12.5	--	--
MAY 11, 1972..	--	--	350	64	400	669	7.6	13.0	--	--
AUG. 9, 1972..	--	--	300	58	364	590	7.9	14.0	--	--

MONTGOMERY COUNTY

393853N0841707 MIAMISBURG OHIO BOX BOARD CO. WELL 1 (MT-63), DEPTH 65 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
NOV. 24, 1971.A	1300	150	--	460	0	100	76	.4	2.3	.5
FEB. 14, 1972..	920	88	--	438	0	110	68	.4	2.1	.5
MAY 12, 1972..	1400	130	--	354	0	81	71	.3	9.7	2.2
SEPT.15, 1972.A	2000	200	--	404	0	99	59	.5	.2	.0

MUSKINGUM COUNTY

395753N0815935 ZANESVILLE OHIO MUNICIPAL WELL 6 (MU-10), DEPTH 65 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
NOV. 4, 1971.A	550	850	59	196	0	120	170	--	.6	.1
JUNE 12, 1972.A	670	--	79	228	0	120	180	--	.8	.2

PICKAWAY COUNTY

393325N0825711 CIRCLEVILLE OHIO PITTSBURG PLATE GLASS CO. WELL 2 (PK-21), DEPTH 135 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
NOV. 16, 1971.A	3000	55	7.1	396	0	44	10	--	.0	.0
MAY 24, 1972.A	2500	--	7.4	400	0	45	10	--	.1	.0

RICHLAND COUNTY

404100N0823505 LEXINGTON OHIO STEVENS MANUFACTURING CO. WELL (R-10), DEPTH 168 FT, WATER BEARING FORMATION SANDSTONE

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
NOV.15, 1971.A	830	100	36	232	0	29	22	--	.0	.0

TUSCARAWAS COUNTY

403210N0812931 DOVER OHIO MUNICIPAL WELL 7 (TU-10), DEPTH 103 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
NOV. 10, 1971.A	760	320	4.9	100	0	120	8.0	--	.0	.0
JUNE 12, 1972.A	860	--	3.5	204	0	100	5.5	--	.0	.0

WILLIAMS COUNTY

412853N0843220 BRYAN OHIO MUNICIPAL WELL 4 (WM-10), DEPTH 147 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	IRON (FE) (UG/L)	MAN-GANESE (MN) (UG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE AS N (NO3-N) (MG/L)
NOV. 11, 1971.A	610	0	26	372	0	36	10	--	2.3	.5
MAY 23, 1972.A	630	--	30	358	0	33	42	--	1.5	.3

A Heavy metals determined on this date, see page 464-465.

DATE	TOTAL PHOS-PHORUS ($P-PO_4$) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	pH	TEMP-ERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MONTGOMERY COUNTY										
393853N0841707 MIAMISBURG OHIO BOX BOARD CO. WELL 1 (MT-63), DEPTH 65 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 24, 1971..	--	--	460	82	635	1030	7.3	15.0	--	--
FEB. 14, 1972..	--	--	440	80	604	988	7.4	16.0	--	--
MAY 12, 1972..	--	--	380	90	582	893	7.3	15.0	--	--
SEPT.15, 1972	--	--	420	88	566	914	7.8	15.0	--	--
MUSKINGUM COUNTY										
395753N0815935 ZANESVILLE OHIO MUNICIPAL WELL 6 (MU-10), DEPTH 65 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 4, 1971..	.02	.07	390	230	668	1020	7.9	--	3	.06
JUNE 12, 1972..	.03	.01	420	230	716	1120	7.4	14.0	2	.03
PICKAWAY COUNTY										
393325N0825711 CIRCLEVILLE OHIO PITTSBURG PLATE GLASS CO. WELL 2 (PK-21), DEPTH 135 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 16, 1971..	.03	.01	370	45	388	649	7.8	--	5	.00
MAY 24, 1972..	.19	.06	370	42	406	669	7.5	--	3	.00
RICHLAND COUNTY										
404100N0823505 LEXINGTON OHIO STEVENS MANUFACTURING CO. WELL (R-10), DEPTH 168 FT, WATER BEARING FORMATION SANDSTONE										
NOV. 15, 1971..	.03	.01	180	0	258	453	8.0	--	1	.00
TUSCARAWAS COUNTY										
403210N0812931 DOVER OHIO MUNICIPAL WELL 7 (TU-10), DEPTH 103 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 10, 1971..	.02	.01	270	190	308	493	8.1	--	0	.12
JUNE 12, 1972..	.03	.01	270	100	336	513	7.7	13.5	0	.00
WILLIAMS COUNTY										
412853N0843220 BRYAN OHIO MUNICIPAL WELL 4 (WM-10), DEPTH 147 FT, WATER BEARING FORMATION SAND AND GRAVEL										
NOV. 11, 1971..	.12	.04	320	14	356	625	7.8	--	3	.21
MAY 23, 1972..	.28	.09	300	6	382	645	7.3	--	0	.03

DATE	ARSENIC (AS) (UG/L)	CHRO-MIUM (CR) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
ATHENS COUNTY--Continued						
391934N082065000 ATHENS OHIO MUNICIPAL WELL 2A (AT-10), DEPTH 52 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 4, 1971..	--	0	--	4	1	--
JUNE 5, 1972..	--	0	--	1	--	--
AUGLAIZE COUNTY--Continued						
403403N084125700 WAPAKONETA OHIO MUNICIPAL WELL 6 (AU-11), DEPTH 268 FT, WATER BEARING FORMATION DOLOMITE						
NOV. 3, 1971..	--	0	--	2	0	--
MAY 23, 1972..	--	2	--	2	--	--
BUTLER COUNTY--Continued						
392445N0843330 HAMILTON OHIO CHAMPION PAPER CO.,WELL 4 (BU-36), DEPTH 168 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 24, 1971..	0	0	0	4	--	110
AUG. 10, 1972..	1	0	4	6	--	10
CLARK COUNTY--Continued						
395835N0834917 SPRINGFIELD OHIO MUNICIPAL WELL 4 (CL-20), DEPTH 96 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 3, 1971..	--	0	--	4	1	--
MAY 23, 1972..	--	6	--	1	--	--
HAMILTON COUNTY--Continued						
391634N0841526 LOVELAND OHIO MUNICIPAL WELL 2 (H-22), DEPTH 70 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 30, 1971.	--	0	--	3	0	--
JUNE 5, 1972..	--	0	--	2	--	--
390645N0844805 NORTH BEND OHIO, DUPONT CORP. WELL 38 (H-21), DEPTH 134 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 11, 1971..	--	0	--	4	2	--
JUNE 5, 1972..	--	0	--	0	--	--
391748N0843938 ROSS OHIO SOUTHWEST OHIO WATER CO. COLLECTOR 1 (H-19), DEPTH 144 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 24, 1971..	7	0	43	6	--	200
AUG. 10, 1972	0	0	4	7	--	30
JEFFERSON COUNTY--Continued						
401853N0803611 MINGO JUNCTION OHIO MUNICIPAL WELL (JE-10), DEPTH 74 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 4, 1971..	--	0	--	14	3	--
JUNE 5, 1972..	--	0	--	0	--	--
MEDINA COUNTY--Continued						
410040N0814249 WADSWORTH OHIO MUNICIPAL WELL 7 (MD-10), DEPTH 227 FT WATER BEARING FORMATION SANDSTONE						
NOV. 10, 1971..	--	0	--	1	1	--
MAY 22, 1972..	--	0	--	12	--	--
MIAMI COUNTY--Continued						
400258N0841228 TROY OHIO MUNICIPAL WELL 6 (MI-15), DEPTH 177, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 24, 1971..	0	0	0	7	--	0
AUG. 9, 1972..	0	0	2	6	--	10
MONTGOMERY COUNTY--Continued						
393853N0841707 MIAMISBURG OHIO BOX BOARD CO. WELL 1 (MT-63), DEPTH 65 FT, WATER BEARING FORMATION SAND AND GRAVEL						
NOV. 24, 1971..	0	0	11	9	--	120
SEPT.15, 1972..	4	3	160	0	--	60

MUSKINGUM COUNTY--Continued

395753N0815935 ZANESVILLE OHIO MUNICIPAL WELL 6 (MU-10), DEPTH 65 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	ARSENIC (AS) (UG/L)	CHRO-MIUM (CR) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
NOV. 4, 1971..	--	0	--	5	2	--
JUNE 12, 1972..	--	0	--	5	--	--

PICKAWAY COUNTY--Continued

393325N0825711 CIRCLEVILLE OHIO PITTSBURG PLATE GLASS CO. WELL 2 (PK-21), DEPTH 135 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	ARSENIC (AS) (UG/L)	CHRO-MIUM (CR) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
NOV. 16, 1971..	--	0	--	11	0	--
MAY 24, 1972..	--	0	--	6	--	--

RICHLAND COUNTY--Continued

404100N0823505 LEXINGTON OHIO STEVENS MANUFACTURING CO. WELL (R-10), DEPTH 168 FT, WATER BEARING FORMATION SANDSTONE

DATE	ARSENIC (AS) (UG/L)	CHRO-MIUM (CR) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
NOV. 15, 1971..	--	0	--	16	24	--

TUSCARAWAS COUNTY--Continued

403210N0812931 DOVER OHIO MUNICIPAL WELL 7 (TU-10), DEPTH 103 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	ARSENIC (AS) (UG/L)	CHRO-MIUM (CR) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
NOV. 10, 1971..	--	0	--	3	0	--
JUNE 12, 1972..	--	0	--	3	--	--

RICHLAND COUNTY--Continued

412853N0843220 BRYAN OHIO MUNICIPAL WELL 4 (WM-10), DEPTH 147 FT, WATER BEARING FORMATION SAND AND GRAVEL

DATE	ARSENIC (AS) (UG/L)	CHRO-MIUM (CR) (UG/L)	COPPER (CU) (UG/L)	LEAD (PB) (UG/L)	NICKEL (NI) (UG/L)	ZINC (ZN) (UG/L)
NOV. 11, 1971..	--	0	--	1	0	--
MAY 23, 1972..	--	2	--	2	--	--

LITTLE BEAVER CREEK BASIN

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OHIO (LAT 40°40'33", LONG 80°32'27")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
26...	1145	15.0	56	10	1.5
NOV.					
24...	1100	1.5	112	2	.60
JAN.					
25...	1050	3.0	665	11	20
FEB.					
24...	1335	.0	578	13	20
MAR.					
27...	1200	5.0	800	7	15
APR.					
16...	1440	13.0	3580	246	2380
25...	1325	13.0	1020	7	19
MAY					
25...	1135	17.0	205	4	2.2
JUNE					
26...	1215	20.0	1490	41	165
JULY					
25...	1120	24.0	188	7	3.6
AUG.					
25...	1210	22.0	91	16	3.9
SEP.					
19...	1430	20.5	1220	123	405
28...	1145	16.0	182	2	.98

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
SEP.									
19...	1430	45	60	75	87	94	98	99	100

YELLOW CREEK BASIN

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OHIO (LAT 40°32'16", LONG 80° 43'31")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
24...	1400	1.5	14	3	.11
JAN.					
25...	1340	3.5	269	42	31
MAR.					
24...	1310	4.0	364	27	27
APR.					
16...	1030	13.0	646	95	166
MAY					
25...	1410	19.0	68	4	.73
JULY					
25...	1320	26.0	28	4	.30
SEP.					
19...	1245	21.5	59	4	.64

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL. WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1245	3	0	0	2	18	31	39	47	58	72	100

SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OHIO (LAT 40°11'36", LONG 80°44'04")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
23...	1015	.0	21	10	.57
JAN.					
26...	1030	.0	94	67	17
MAR.					
23...	1010	4.5	302	100	82
APR.					
14...	1045	11.5	565	294	448
16...	1310	14.0	403	280	305
MAY					
12...	1020	13.0	127	80	27
JUNE					
19...	1145	22.0	54	100	15
JULY					
28...	1035	20.0	44	487	58
AUG.					
16...	1125	22.0	26	18	1.3
SEP.					
19...	1115	19.5	159	4	1.7

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR.											
14...	1045	28	38	49	61	68	74	79	83	91	100
16...	1310	23	42	59	72	85	86	91	93	97	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1115	2	1	2	4	12	18	24	34	52	76	100
19...	1120	1	44	61	70	72	72	72	72	73	81	100

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39°54'31", LONG 80°55'27")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
15...	1125	10.0	17	5	.23
JAN.					
12...	1135	3.0	259	4	2.8
MAR.					
08...	1110	3.5	710	70	134
APR.					
16...	1550	--	1530	263	1090
MAY					
09...	1235	13.0	107	9	2.6
JUNE					
13...	1105	17.0	11	8	.24
AUG.					
21...	1120	24.0	26	8	.56
SEP.					
19...	0915	21.5	1.2	4	.01

CAPTINA CREEK BASIN—Continued

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO (LAT 39°54'31", LONG 80°55'27")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR.											
16...	1550	38	47	55	69	80	86	91	96	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	0915	1	0	0	0	1	4	9	20	31	42	100
19...	0920	2	0	1	2	3	5	11	23	41	60	100

LITTLE MUSKINGUM RIVER BASIN

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO (LAT 39°33'47", LONG 81°12'14")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
15...	1530	9.0	19	10	.51
JAN.					
12...	1425	5.5	442	12	14
MAR.					
08...	1430	5.5	1020	74	204
APR.					
16...	1800	--	835	60	135
MAY					
09...	1550	15.0	236	20	13
JUNE					
13...	1415	18.0	12	10	.32
JULY					
27...	1500	25.0	25	12	.81
AUG.					
21...	1450	23.0	72	20	3.9
SEP.					
05...	1320	19.0	46	10	1.2
18...	1900	21.5	4.1	8	.09

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR.									
08...	1430	30	42	55	73	87	93	97	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
18...	1900	2	4	5	8	17	25	29	36	45	60	81
18...	1905	1	67	82	96	100	--	--	--	--	--	--

PARTIAL RECORD SUSPENDED SEDIMENT STATIONS IN THE OHIO RIVER BASIN

MUSKINGUM RIVER BASIN

03116200 CHIPPEWA CREEK AT EASTON, OHIO (LAT 40°56'47", LONG 81°44'35")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
18...	1400	12.0	12	26	.84
JAN.					
19...	1425	2.0	68	19	3.5
MAR.					
20...	1330	5.0	309	40	33
MAY					
17...	1125	16.0	84	29	6.6
JULY					
12...	1150	20.0	58	49	7.7
SEP.					
06...	1415	20.5	17	58	2.7
14...	1115	20.0	855	397	916
20...	1030	18.5	179	80	39

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
SEP.										
14...	1115	43	56	64	76	87	93	97	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SILVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
SEP.									
20...	1030	2	5	8	24	82	95	99	100
20...	1035	1	75	86	96	99	100	--	--

03117500 SANDY CREEK AT WAYNESBURG, OHIO (LAT 40°40'21", LONG 81°15'36")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
04...	1315	20.0	30	11	.89
NOV.					
17...	1135	7.5	25	10	.67
30...	1300	4.0	131	30	11
DEC.					
06...	1015	6.0	406	85	93
21...	1320	--	177	13	6.2
JAN.					
14...	0935	2.0	268	19	14
MAR.					
15...	0940	4.0	1600	83	359
APR.					
21...	0945	9.5	1150	64	199
MAY					
15...	1220	15.0	215	10	5.8
JULY					
10...	1030	13.0	237	42	27
SEP.					
11...	1445	18.0	35	10	.94
19...	1645	21.0	234	32	20

03117500 SANDY CREEK AT WAYNESBURG OHIO (LAT 40°40'21", LONG 81°15'36")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
DEC.									
08...	1015	58	67	76	83	89	92	94	100

PARTICAL SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1645	2	0	1	3	15	20	25	33	49	71	100
19...	1650	1	1	2	4	44	92	100	--	--	--	--

03123000 SUGAR CREEK ABOVE BEACH CITY DAM, AT BEACH CITY, OHIO (LAT 40°39'24", LONG 81°34'37")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
22...	1410	3.0	17	6	.28
JAN.					
24...	1020	3.5	117	17	5.4
MAR.					
02...	1400	6.5	614	512	849
22...	1500	8.0	350	100	94
APR.					
21...	1330	12.0	1430	142	548
MAY					
03...	1130	16.5	346	326	305
19...	1410	17.0	98	50	13
JULY					
05...	1430	18.0	134	150	54
14...	1135	22.0	66	66	12
17...	1300	23.0	1000	240	648
SEP.					
15...	1115	18.0	320	223	193
19...	1900	21.0	73	50	9.9

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR.									
02...	1400	30	40	55	68	85	91	96	100
APR.									
21...	1330	59	69	74	78	86	91	97	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1900	1	0	0	0	1	2	7	15	24	41	100
19...	1905	2	1	1	2	6	13	22	36	58	89	100

MUSKINGUM RIVER BASIN--Continued

03137000 KOKOSING RIVER AT MILLWOOD, OHIO (LAT 40°23'51", LONG 82°17'09")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV. 23...	1245	1.0	58	4	.63
FEB. 18...	1230	4.5	775	16	33
MAR. 09...	1300	2.5	725	24	47
17...	1050	6.0	2040	132	727
APR. 13...	1445	14.5	6120	795	13100
AUG. 22...	1340	22.0	281	26	20

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR. 13...	1445	44	58	67	79	87	94	97	98	100

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO (LAT 40°07'57", LONG 82°08'53")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT. 01...	1430	23.0	10	4	.11
NOV. 17...	1245	10.0	8.4	6	.14
APR. 13...	1100	14.0	1280	789	2730

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR. 13...	1100	44	58	70	82	93	96	99	100

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OHIO (LAT 39°03'49", LONG 81°52'55")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT. 15...	1515	14.0	8.8	12	.29
DEC. 09...	1045	10.0	270	76	55
FEB. 02...	1715	1.5	90	6	1.5
MAR. 27...	1220	5.5	162	4	1.7
APR. 17...	0845	--	778	345	725
SEP. 18...	1715	21.0	5.4	8	.12

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE OHIO RIVER BASIN

SHADE RIVER BASIN--Continued

03159540 SHADE RIVER NEAR CHESTER, OHIO (LAT 39°03'09", LONG 81°53'50")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR.									
17...	1045	43	59	72	89	97	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
18...	1715	3	1	1	2	7	11	14	20	36	70	100

SCIOTO RIVER BASIN

03223000 OLENTANGY RIVER AT CLARIDON, OHIO (LAT 40°34'50", LONG 82°58'20")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
05...	1035	21.5	3.2	28	.24
NOV.					
01...	1425	15.5	5.8	66	1.1
02...	1500	12.0	6.5	25	.44
03...	1400	13.0	6.7	37	.67
29...	1515	6.5	7.5	16	.28
DEC.					
07...	1435	1.0	32	12	1.0
JAN.					
17...	1525	3.5	238	25	16
MAR.					
09...	1415	5.5	529	218	480
13...	1330	10.0	238	32	20
APR.					
13...	1415	--	1130	1030	3140
20...	1500	12.5	2500	718	5670
22...	1445	11.0	2180	225	1300
AUG.					
21...	1340	21.0	85	110	21
SEP.					
21...	1445	19.5	33	26	2.3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
APR.								
13...	1415	79	91	92	97	99	100	--
20...	1500	72	86	86	96	99	99	100
22...	1440	76	82	85	97	99	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
APR.											
[illegible]	[illegible]	3	27	57	87	96	98	98	97	100	--
[illegible]	[illegible]	1	73	84	96	100	--	--	--	--	--
[illegible]	[illegible]	3	3	9	12	20	56	71	87	--	100
[illegible]	[illegible]	3	25	46	62	80	91	96	98	100	--
SEP.											
[illegible]	[illegible]	1	41	56	71	81	86	91	96	100	--

SCIOTO RIVER BASIN--Continued

03228805 ALUM CREEK AT AFRICA, OHIO (LAT 40°10'56", LONG 82°57'42")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
04...	0920	21.0	2.2	11	.07
NOV.					
01...	0920	14.5	2.2	16	.10
17...	1250	10.5	2.2	50	.30
DEC.					
01...	0830	1.0	30	53	4.3
06...	1100	4.5	33	2520	225
14...	1400	3.0	74	4400	879
JAN.					
11...	0820	8.5	234	54	34
MAR.					
02...	1515	3.0	932	394	991
07...	1350	5.0	79	48	10
APR.					
26...	1445	13.0	108	296	86

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
DEC.									
14...	1400	68	81	90	98	100	--	--	--
MAR.									
02...	1515	41	54	66	78	88	91	97	100

03230500 BIG DARBY CREEK AT DARBYVILLE, OHIO (LAT 39°42'03", LONG 83°06'35")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
19...	1120	16.0	52	32	4.5
NOV.					
15...	1030	12.0	45	28	3.7
19...	1500	10.0	45	18	2.2
DEC.					
21...	1045	5.5	512	60	83
JAN.					
18...	1435	2.0	376	32	32
MAR.					
27...	1115	7.5	660	43	77
APR.					
06...	1100	11.0	612	60	100
SEP.					
13...	1000	21.0	58	30	4.7

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
SEP.										
13...	1000	1	4	7	16	66	[illegible]	[illegible]	[illegible]	100
27...	1410	1	21	46	66	88	[illegible]	[illegible]	100	--

PARTIAL-RECORD SUSPENDED SEDIMENT STATIONS IN THE OHIO RIVER BASIN

SCIOTO RIVER BASIN--Continued

03230800 DEER CREEK AT MOUNT STERLING, OHIO (LAT 39°42'54", LONG 83°15'26")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
15...	1000	12.5	41	16	1.8
16...	1055	10.5	39	24	2.5
DEC.					
17...	1355	8.0	500	63	85
21...	1015	5.5	318	20	17
JAN.					
14...	1120	2.0	254	24	16
MAR.					
03...	1105	3.0	660	87	155
27...	1045	7.5	284	33	25
APR.					
13...	1145	16.0	2330	1480	9310
26...	1020	11.0	311	112	94
SEP.					
15...	1100	20.5	35	28	2.6

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
APR.							
13...	1145	75	89	94	98	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
15...	1100	2	0	0	0	1	2	4	8	13	23	76

03232000 PAINT CREEK NEAR GREENFIELD, OHIO (LAT 39°22'45", LONG 83°22'32")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
17...	[illegible]	10.0	[illegible]	10	[illegible]
DEC.					
21...	[illegible]	[illegible]	[illegible]	11	[illegible]
JAN.					
14...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR.					
13...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR.					
13...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY					
02...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP.					
15...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR.									
13...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100

SCIOTO RIVER BASIN--Continued

03232000 PAINT CREEK NEAR GREENFIELD, OHIO (LAT 39°22'45", LONG 83°22'32")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP. 15...	1330	2	0	0	1	5	10	16	22	31	42	66

OHIO BRUSH CREEK BASIN

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OHIO (LAT 38°48'13", LONG 83°25'16")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV. 23...	1100	4.0	39	20	2.1
DEC. 07...	1600	12.0	7210	435	8470
JAN. 11...	1510	6.0	758	38	78
MAR. 16...	1220	9.0	460	88	109
APR. 22...	1745	14.0	3010	321	2610
28...	0955	11.0	308	56	47
JUNE 16...	1350	22.0	1130	674	2060
SEP. 18...	1330	22.5	3.2	24	.21

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
DEC. 07...	1600	44	55	67	81	90	98	99	100	--
APR. 22...	1745	51	63	74	86	96	99	100	--	--
JUNE 16...	1350	61	76	87	95	97	98	99	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP. 18...	1330		0	0	1	4	10	10	27	37	56	88

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE OHIO RIVER BASIN

WHITEOAK CREEK BASIN

03238500 WHITEOAK CREEK NEAR GEORGETOWN, OHIO (LAT 38°50'42", LONG 83°55'16")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
12...	1600	17.0	24	4	.26
NOV.					
12...	1005	5.5	20	17	.92
30...	1700	6.0	588	136	216
DEC.					
07...	1745	10.5	4720	175	2230
08...	0915	11.0	1610	119	517
JAN.					
11...	1050	6.0	436	50	59
13...	1715	5.5	152	18	7.4
FEB.					
18...	1130	9.0	958	82	212
MAR.					
02...	1000	9.0	1910	438	2260
APR.					
05...	1215	10.0	465	192	241
27...	1055	16.0	95	18	4.6
MAY					
12...	0800	14.5	92	214	53
JUNE					
16...	0940	21.0	1660	2880	12900
16...	1500	17.0	2230	2270	13700
AUG.					
18...	1330	31.0	210	27	15
SEP.					
18...	1445	22.0	.17	36	.02

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
DEC.									
07...	1745	50	65	74	88	94	98	99	100
MAR.									
02...	1000	41	54	66	83	96	99	100	--
JUNE									
16...	1500	55	73	87	96	98	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
18...	1445	2	0	0	0	1	3	6	14	27	44	69

LITTLE MIAMI RIVER BASIN

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OHIO (LAT 39°06'52", LONG 84°01'29")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
13...	1215	14.0	26	34	2.4
NOV.					
11...	1040	5.0	25	12	.81
30...	1600	5.0	404	114	124
JAN.					
05...	1320	4.5	1300	163	572
14...	1300	4.0	245	18	12
FEB.					
17...	1415	3.0	528	84	120
MAR.					
01...	1140	9.0	280	38	29
APR.					
05...	1000	8.0	386	259	270
MAY					
11...	1145	14.0	192	48	25
JUNE					
15...	1025	21.0	196	348	184
SEP.					
18...	1600	23.5	6.9	18	.34

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
JAN.								
05...	1320	55	70	78	90	98	99	100
APR.								
05...	1000	68	84	94	97	99	100	--

GREAT MIAMI RIVER BASIN

03262700 GREAT MIAMI RIVER AT TROY, OHIO (LAT 40°02'25", LONG 84°11'52")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
29...	1500	18.0	86	17	3.9
NOV.					
18...	1545	14.0	84	12	2.7
DEC.					
09...	1200	7.0	868	74	173
27...	1140	7.5	616	29	48
MAR.					
16...	1200	5.5	1470	55	218
23...	1500	5.0	1240	46	154
APR.					
08...	1140	2.0	7040	484	9200
22...	1420	10.5	9900	336	8980
MAY					
03...	1600	10.0	666	24	43
JUNE					
08...	1205	22.5	410	40	45
28...	1000	17.5	384	48	50
SEP.					
19...	1245	23.5	147	36	14

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR.									
08...	1140	76	82	88	92	95	96	98	100
22...	1420	63	73	77	80	86	88	92	100

GREAT MIAMI RIVER BASIN--Continued

03262700 GREAT MIAMI RIVER AT TROY, OHIO (LAT 40°02'25", LONG 84°11'52")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1245	2	0	0	0	0	1	4	9	18	42	69

03264000 GREENVILLE CREEK NEAR BRADFORD, OHIO (LAT 40°06'08", LONG 84°25'48")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
29...	1205	15.0	28	30	2.3
NOV.					
18...	1340	12.0	23	13	.81
DEC.					
22...	1155	2.0	114	17	5.2
JAN.					
24...	1135	4.0	185	22	11
MAR.					
16...	1520	6.0	182	16	7.9
APR.					
17...	1015	13.0	1370	302	1120
MAY					
04...	1430	15.0	145	42	16
JUNE					
15...	1110	20.5	591	184	294
SEP.					
19...	1500	22.5	19	23	1.2

03267000 MAD RIVER NEAR URBANA, OHIO (LAT 40°06'27", LONG 83°47'57")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
04...	1000	7.0	49	17	2.2
17...	1450	12.5	46	24	3.0
DEC.					
07...	1400	9.0	114	11	3.4
07...	1525	9.0	122	20	6.6
15...	1430	10.5	332	88	79
21...	1010	6.0	119	48	15
MAR.					
02...	1220	--	367	163	162
APR.					
07...	1145	3.0	1790	2910	14100
13...	1055	15.0	1350	4240	15500
MAY					
01...	1500	16.0	280	44	33
SEP.					
19...	1600	18.5	80	11	2.4

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
DEC.											
15...	1430	65	76	82	92	97	99	100	--	--	--
MAR.											
02...	1220	52	67	79	92	97	99	99	99	100	--
APR.											
07...	1145	40	53	64	78	90	96	97	98	99	100
13...	1055	53	70	82	91	96	99	99	100	--	--

GREAT MIAMI RIVER BASIN--Continued

03267000 MAD RIVER NEAR URBANA, OHIO (LAT 40°06'27", LONG 83°47'57")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1600	1	0	0	0	1	4	6	11	18	29	45

03271800 TWIN CREEK NEAR INGOMAR, OHIO (LAT 39°42'28", LONG 84°31'30")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
06...	1515	20.5	4.8	9	.12
NOV.					
23...	1445	3.0	12	4	.13
DEC.					
07...	1310	5.5	86	64	15
28...	1220	6.0	52	46	6.5
MAR.					
28...	1520	11.5	129	12	4.2
APR.					
20...	1245	14.0	458	64	79
25...	1135	11.0	294	44	35
SEP.					
19...	1045	20.5	7.4	26	.52

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	1045	2	0	0	1	6	16	26	35	43	56	76

03272800 SEVENMILE CREEK AT COLLINSVILLE, OHIO (LAT 39°31'23", LONG 84°36'39")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
06...	1210	17.5	4.9	29	.38
NOV.					
24...	1610	5.0	9.5	18	.46
DEC.					
28...	1540	6.5	56	5	.76
APR.					
17...	1535	16.0	468	118	149
20...	1135	14.0	277	63	47
MAY					
31...	1530	14.5	140	16	6.0
SEP.					
19...	0900	19.5	6.3	18	.31

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
19...	0900	1	0	0	1	9	19	27	37	51	80	100

PARTIAL-RECORD SUSPENDED-SEDIMENT STATIONS IN THE ST. LAWRENCE RIVER BASIN

STREAMS TRIBUTARY TO LAKE ERIE

04185000 TIFFIN RIVER AT STRYKER, OHIO (LAT 41°30'17", LONG 84°25'49")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.					
06...	0915	15.0	19	69	3.5
JAN.					
19...	1055	1.5	91	23	5.7
FEB.					
15...	1350	1.0	110	137	41
MAR.					
22...	1650	6.5	869	111	260
APR.					
08...	2005	4.5	306	11	9.1
22...	1845	9.5	1610	109	474
MAY					
04...	0930	14.0	673	370	672
SEP.					
20...	1700	20.0	232	164	103

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAR.								
22...	1650	71	87	93	98	98	99	100
APR.								
22...	1845	81	92	93	96	97	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
SEP.						
20...	1700	1	56	73	92	100

04196000 SANDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40°48'13", LONG 83°00'21")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
18...	1445	15.5	3.3	6	.05
JAN.					
17...	1505	2.0	22	9	.53
MAR.					
03...	1330	2.5	348	88	83
06...	1300	1.5	73	26	5.1
APR.					
13...	1125	--	627	1340	2270
21...	1050	9.0	1860	342	1720
MAY					
10...	1115	11.0	384	83	86
SEP.					
21...	1345	20.5	4.9	5	.07

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
APR.								
13...	1125	60	88	93	95	98	99	100
21...	1050	73	84	92	94	98	99	100

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04196000 SANDUSKY RIVER NEAR BUCYRUS, OHIO (LAT 40°38'13", LONG 83°00'21")--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
21...	1345	1	0	1	3	6	10	20	30	45	67	100

04197000 SANDUSKY RIVER NEAR MEXICO, OHIO (LAT 41°02'39", LONG 83°11'42")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
DEC.					
06...	1220	5.5	45	1	.12
JAN.					
21...	0945	.5	206	10	5.6
FEB.					
14...	1135	1.0	110	5	1.5
MAR.					
03...	1115	2.0	3810	737	7580
09...	1230	2.5	394	26	28
APR.					
21...	1650	10.0	6360	913	15700
MAY					
11...	1210	13.5	3310	226	2020
SEP.					
21...	1245	20.0	128	58	20

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR.									
03...	1115	57	70	82	91	96	99	99	100
APR.									
21...	1650	65	81	88	92	95	97	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAMPLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
21...	1245	1	0	0	2	8	12	16	23	31	38	64

04199000 HURON RIVER AT MILAN, OHIO (LAT 41°18'06", LONG 82°36'25")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.					
08...	1250	5.0	17	8	.37
DEC.					
01...	1535	1.5	33	6	.53
JAN.					
10...	1510	3.0	1240	351	1180
11...	1550	3.0	613	58	96
MAR.					
06...	1300	1.0	188	53	27
MAY					
11...	1205	12.5	517	32	45
JULY					
28...	1320	25.5	456	230	283
SEP.					
18...	1530	21.5	1130	324	988
25...	1500	21.5	240	26	17

STREAMS TRIBUTARY TO LAKE ERIE--Continued

04199000 HURON RIVER AT MILAN, OHIO (LAT 41°18'06", LONG 82°36'25")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
JULY											
20...	1320	71	83	91	96	97	98	100	--	--	--
SEP.											
18...	1530	52	64	73	80	86	88	92	97	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
21...	1500	2	1	2	8	18	25	32	43	56	73	91

04200500 BLACK RIVER AT ELYRIA, OHIO (LAT 41°22'49", LONG 82°06'17")

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
09...	1020	6.0	9.6	8	.21
JAN.					
11...	1630	2.0	862	70	163
MAR.					
07...	0950	2.0	281	27	20
MAY					
12...	1000	13.5	348	45	42
JUNE					
24...	1250	13.0	698	68	128
JULY					
21...	1010	26.0	113	16	4.9
SEP.					
18...	1430	19.0	5520	350	5220
21...	1230	19.0	322	52	45

04200500 BLACK RIVER AT ELYRIA, OHIO (LAT 41°22'49", LONG 82°06'17")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
SEP.									
18...	1430	54	68	79	87	92	98	99	100

04212000 GRAND RIVER NEAR MADISON, OHIO (LAT 41°44'26", LONG 81°02'48")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
02...	1705	16.0	79	11	2.3
11...	1515	6.0	161	10	4.3
MAR.					
09...	1545	.5	2940	59	468
14...	1035	--	4580	168	2080
APR.					
16...	0945	11.0	2840	188	1440
MAY					
10...	0925	10.5	2170	66	387
JUNE					
24...	0850	14.0	5100	134	1850
JULY					
11...	0955	22.0	245	8	5.3
SEP.					
20...	1400	18.5	105	15	4.3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR.										
14...	1035	29	41	54	71	84	91	95	96	100
APR.										
16...	0945	44	60	72	84	93	98	99	100	--
JUNE										
24...	0850	42	53	64	76	89	93	96	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
NOV.												
02...	1705	1	1	2	3	5	8	18	44	65	100	--
SEP.												
20...	1400	2	1	1	1	2	4	8	14	24	42	64

04212500 ASHTABULA RIVER NEAR ASHTABULA, OHIO (LAT 41°51'20", LONG 80°45'44")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
02...	1435	17.5	6.4	3	.05
10...	1530	3.0	84	6	1.4
DEC.					
01...	1100	2.0	551	35	52
JAN.					
11...	1545	1.0	335	20	18
MAR.					
08...	1540	.5	1680	114	517
14...	1200	--	1940	171	896
APR.					
16...	1045	10.5	770	41	85
MAY					
09...	1015	9.0	189	14	7.1
JUNE					
24...	1130	13.0	2320	163	1020
JULY					
11...	1320	24.5	207	10	5.6
SEP.					
20...	1500	22.5	13	1	.04

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR.											
14...	1200	26	38	51	66	72	94	97	98	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.												
20...	1500	1	3	5	7	9	12	18	25	35	60	100

04213000 CONNEAUT CREEK AT CONNEAUT, OHIO (LAT 41°58'37", LONG 80°36'18")

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
02...	1300	17.5	20	3	.16
10...	1145	3.0	196	8	4.2
DEC.					
01...	[illegible]	3.0	1660	74	332
JAN.					
11...	1150	1.0	565	36	53
MAR.					
01...	1325	2.0	1600	200	1240
08...	1130	--	1130	162	494
14...	1325	--	1950	207	1000
APR.					
16...	1130	11.0	1000	162	472
MAY					
09...	1500	16.0	776	80	167
JUNE					
[illegible]	[illegible]	13.5	[illegible]	[illegible]	[illegible]
JULY					
11...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP.					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STREAMS TRIBUTARY TO LAKE ERIE --Continued

04213000 CONNEAUT CREEK AT CONNEAUT, OHIO (LAT 41°55'37", LONG 80°36'15")--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR.										
14...	1325	22	34	50	71	88	96	98	99	100

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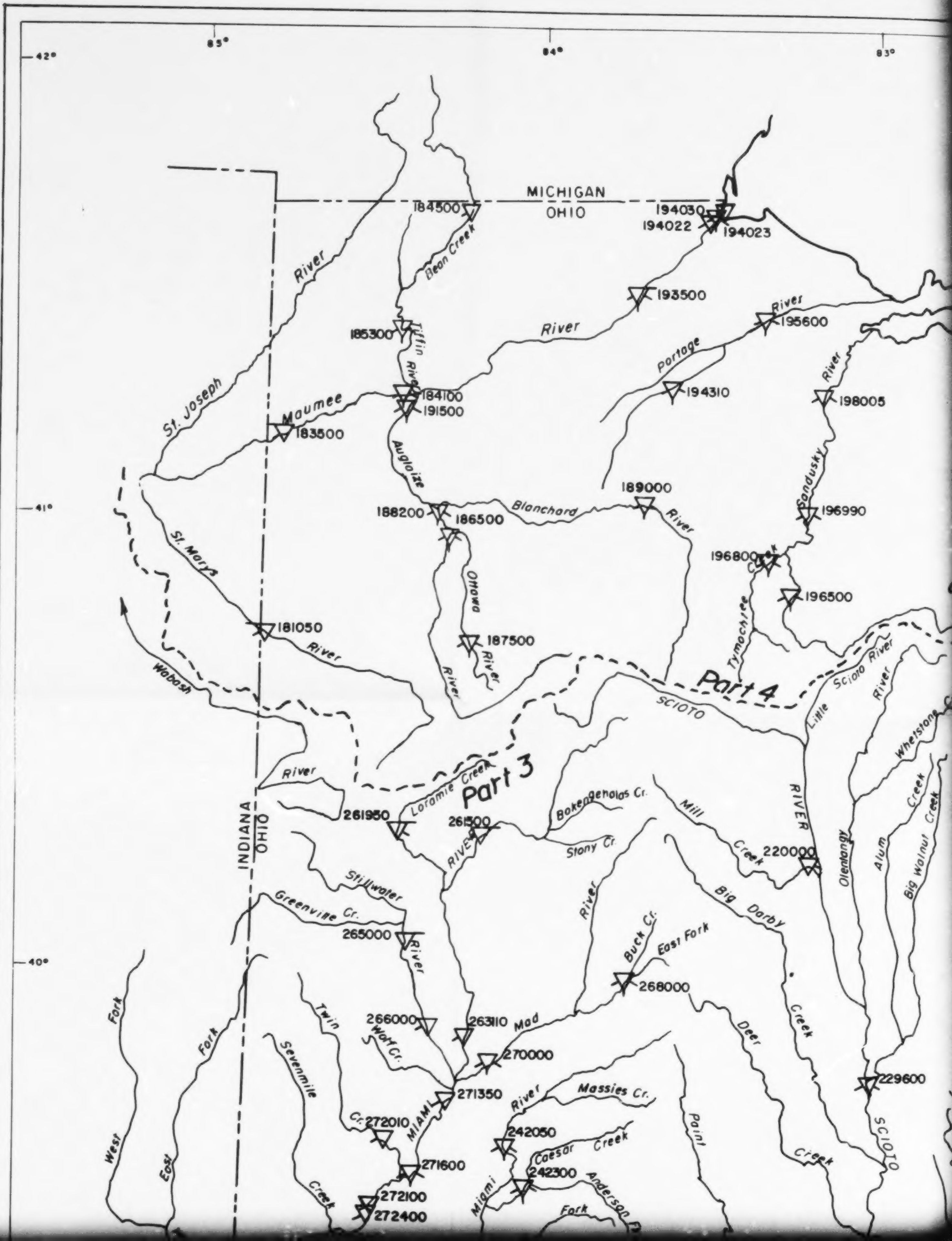
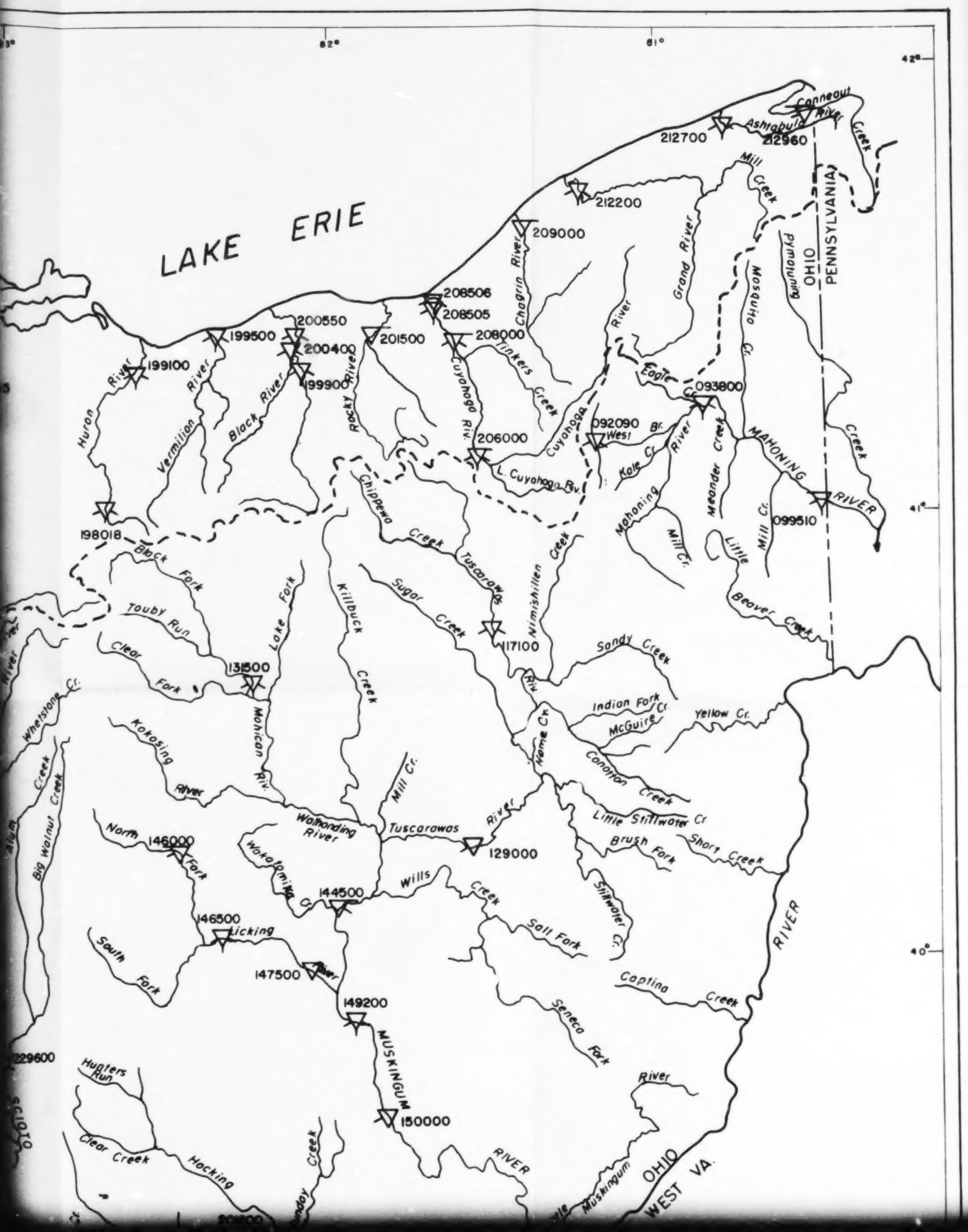
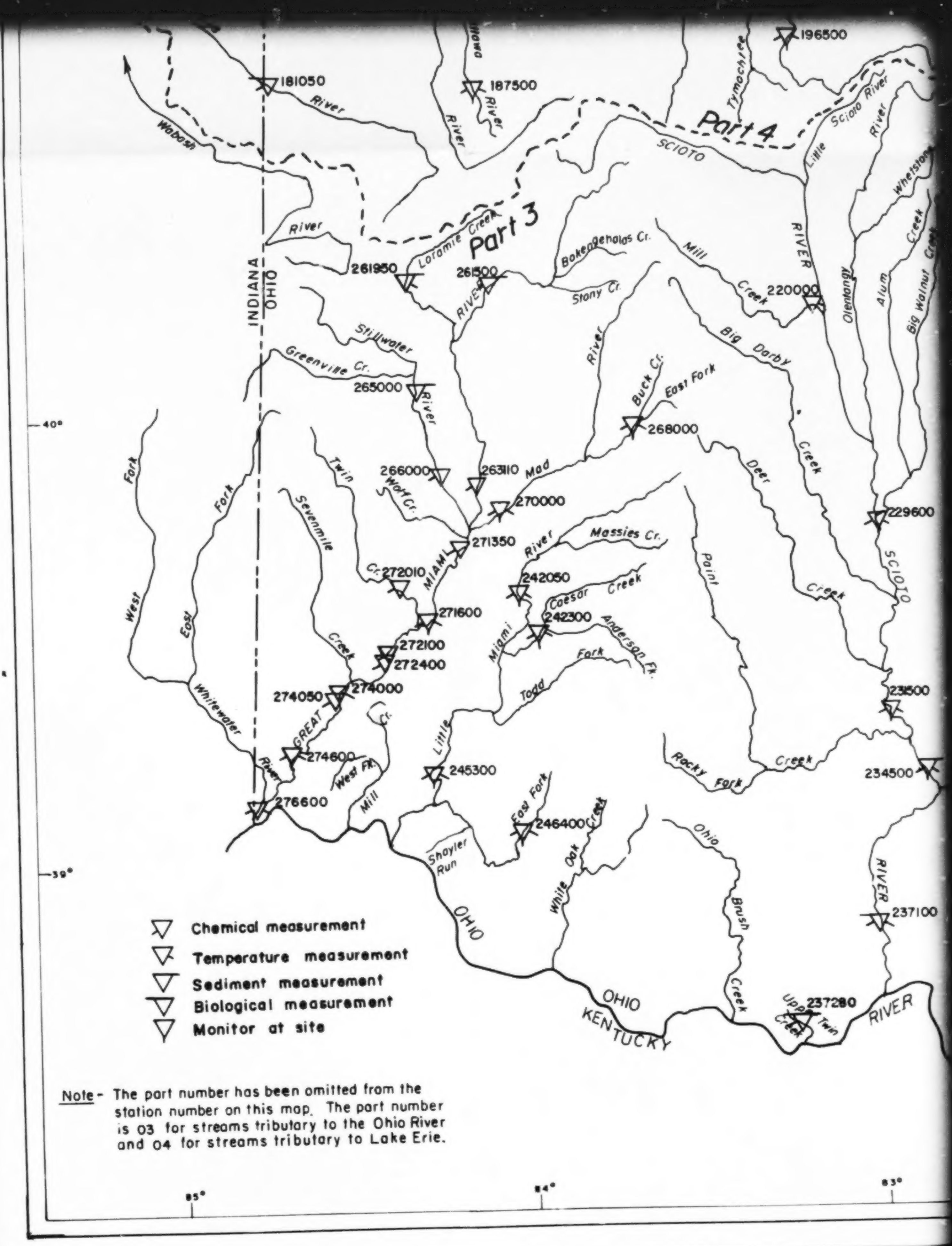

42°
85°
84°
83°
41°
40°
MICHIGAN
OHIO
INDIANA
OHIO
184500
Bean Creek
194030
194022
194023
193500
River
St. Joseph
185300
Tiffin
River
River
Portage
Rivers
195600
River
198005
Maumee
184100
191500
183500
194310
Auglaize
188200
186500
Blanchard
189000
River
Sandusky
196990
196800
Creek
196500
Tymochtee
St. Marys
181050
River
Ottawa
187500
River
River
Wabash
Part 4
SCIOTO
Little Scioto River
River
Whetstone Cr.
River
Loramie Creek
Part 3
261950
261500
RIVER
Bokengehalas Cr.
Mill
Creek
Stony Cr.
220000
RIVER
Olentangy
Alum
Creek
Big Walnut Creek
Stillwater
Greenville Cr.
265000
River
River
Big Darby
Buck Cr.
East Fork
268000
Fork
West
Fork
East
Twin
Sevenmile
Wolf Cr.
266000
263110
Mad
270000
Creek
Deer
Creek
271350
MIAMI
River
Massies Cr.
Paint
229600
SCIOTO
Cr.
272010
242050
Caesar Creek
Creek
271600
Miami
242300
Anderson Fk
Creek
272100
272400
Fork

82°
81°
42°
41°
40°
LAKE ERIE
Conneaut Creek
212960
Ashtabula River
212700
212200
Mill Creek
209000
Chagrin River
Grand River
Pymatuning
Mosquito Cr.
OHIO
PENNSYLVANIA
208506
208505
208000
Tinkers Creek
201500
200550
200400
199900
199500
199100
Huron River
Vermilion River
Black River
Rocky River
Cuyahoga Riv.
Cuyahoga River
206000
L. Cuyahoga Rv.
092090
West Br.
Eagle Cr.
093800
Kale Cr.
Mahoning River
Meander Creek
MAHONING RIVER
Creek
099510
Mill Cr.
Mill Cr.
Little Beaver Creek
198018
Black Fork
Touby Run
Clear Fork
131500
Lake Fork
Mohican Riv.
Chippewa Creek
Tuscarawas Riv.
Killbuck Creek
Sugar Creek
117100
Nimishillen Creek
Sandy Creek
Indian Fork
McGuire Cr.
Yellow Cr.
Home Cr.
Conotton Creek
Whetstone Cr.
Kokosing River
Mill Cr.
Walhonding River
Tuscarawas River
129000
Little Stillwater Cr.
Brush Fork
Short Creek
Creek
Big Walnut Creek
North Fork
146000
Wakatomika Cr.
144500
Wills Creek
Salt Fork
Stillwater Cr.
146500
Licking River
147500
South Fork
149200
MUSKINGUM RIVER
Captina Creek
Seneca Fork
RIVER
OHIO RIVER
229600
Hunters Run
150000
Clear Creek
Hocking
Creek
River
Muskingum
OHIO
WEST VA.
SCIOTO
201800


196500
181050
187500
Wabash
River
River
River
Tymochtee
Part 4
Scioto River
Little
River
SCIOTO
Part 3
Loramie Creek
River
Whetstone
Creek
Bokengehalas Cr.
Mill
Creek
RIVER
Olentangy
Alum
Big Walnut
261950
261500
RIVER
Stony Cr.
220000
INDIANA
OHIO
Stillwater
Greenville Cr.
265000
River
River
Big Darby
Buck Cr.
East Fork
268000
Creek
40°
Fork
Twin
266000
Wolf Cr.
263110
Mad
270000
Deer
229600
Fork
Sevenmile
271350
MIAMI
River
Massies Cr.
SCIOTO
Cr.
272010
Paint
West
242050
Caesar Creek
Creek
East
271600
Creek
242300
Anderson Fk.
Miami
272100
272400
Fork
Todd
274050
274000
Whitewater
231500
Cr.
GREAT
Little
274600
River
West Fk.
245300
Rocky Fork
Creek
234500
276600
Mill
East Fork
246400
Creek
Shayler Run
Ohio
39°
White Oak
RIVER
Brush
OHIO
237100
Chemical measurement
Temperature measurement
Sediment measurement
Biological measurement
Monitor at site
Creek
OHIO
237280
Upper Twin Creek
RIVER
KENTUCKY
85°
84°
83°

Note - The part number has been omitted from the station number on this map. The part number is 03 for streams tributary to the Ohio River and 04 for streams tributary to Lake Erie.

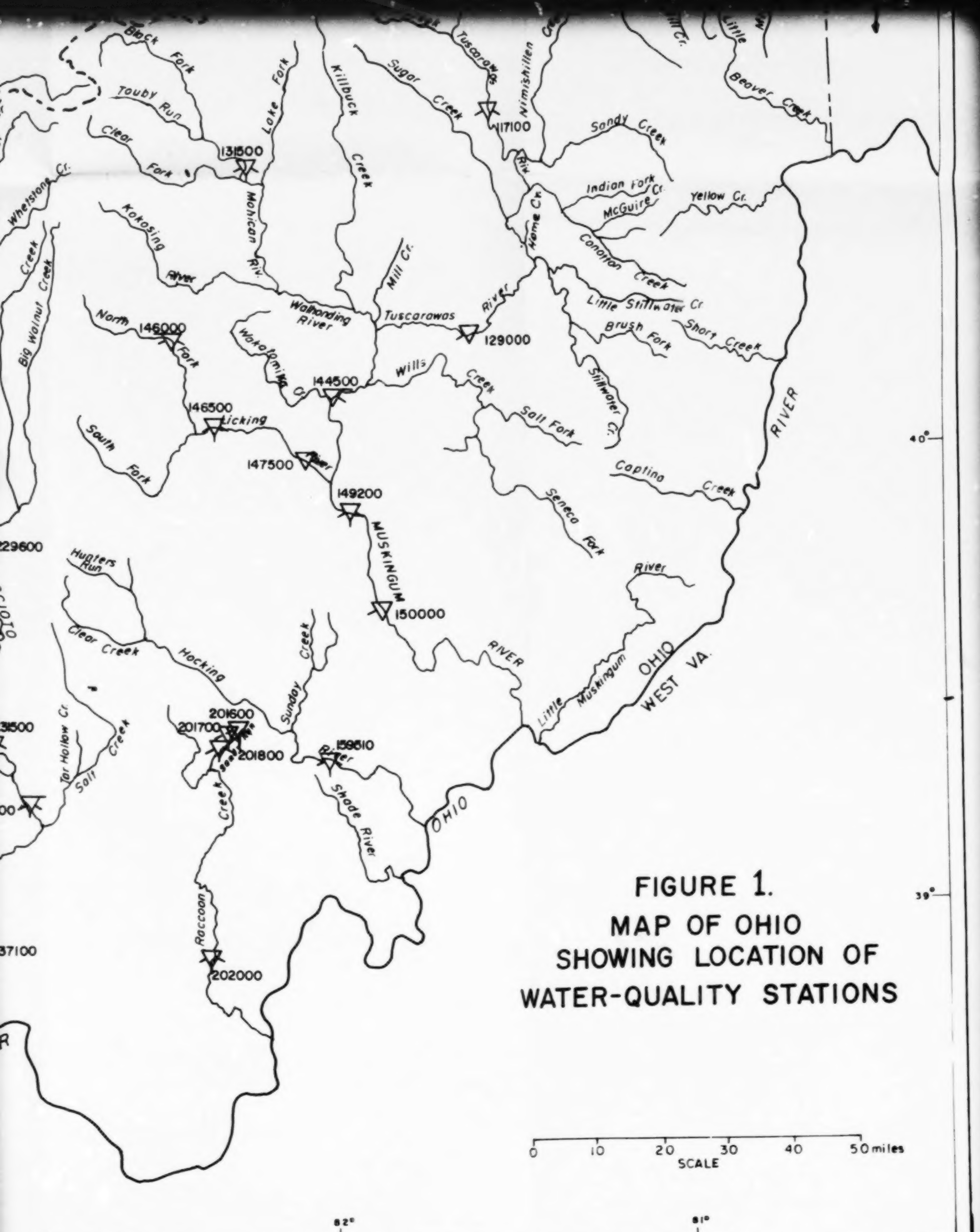

Black Fork
Touby Run
Lake Fork
Killbuck Creek
Sugar Creek
Tuscarawas
Nimishillen Creek
Mill Cr.
Little
Beaver Creek
Clear Fork
131500
117100
Sandy Creek
Whetstone Cr.
Mohican Riv.
Indian Fork
McGuire Cr.
Yellow Cr.
Kokosing River
Home Cr.
Conotton Creek
Big Walnut Creek
Creek
Mill Cr.
Walhonding River
Tuscarawas River
129000
Little Stillwater Cr.
Brush Fork
Short Creek
North Fork
146000
Wakatomika Cr.
144500
Wills Creek
Stillwater Cr.
146500
Licking River
South Fork
147500
Salt Fork
RIVER
40°
Captina Creek
149200
MUSKINGUM
Seneca Fork
129600
Hunters Run
SCIOTO
River
150000
Clear Creek
Hocking
Sunday Creek
RIVER
Little Muskingum
OHIO
WEST VA.
201600
201700
201800
131500
Tar Hollow Cr.
Salt Creek
159610
River
Shade River
Creek
OHIO
Raccoon
39°
137100
202000
R
0
10
20
30
40
50 miles
SCALE
82°
81°

FIGURE 1.
MAP OF OHIO
SHOWING LOCATION OF
WATER-QUALITY STATIONS